Happiness

Transforming the Development Landscape

དཔལ་འབྱུག་ཞིབ་འཇུག་ལྟེ་བ།

Centre for Bhutan Studies and GNH

HAPPINESS

Transforming the Development Landscape

དཔལ་འབྲུག་ཞིབ་འཇུག་སྟེ་བ།

The Centre for Bhutan Studies and GNH

Happiness: Transforming the Development Landscape

NOTE

This work is a joint initiative of Secretariat for New Development Paradigm (SNDP) and IEWG-1 members under the leadership of Dasho Karma Ura, the President of the Centre for Bhutan Studies and GNH, Bhutan.

The Centre would like to thank the following contributors of the report.

CONTENTS

Chapter 1: Introduction

— Ilona Boniwell

Background

Thirty years ago, the Fourth King of Bhutan famously proclaimed that "Gross National Happiness is more important than Gross National Product," thereby setting Bhutan on a holistic development path. Following this historic declaration, Bhutan developed a Gross National Happiness (GNH) Index and screening tool to evaluate all new policies, proclaiming that:

> "Gross National Happiness measures the quality of a country in more holistic way [than GNP] and believes that the beneficial development of human society takes place when material and spiritual development occur side by side to complement and reinforce each other."[1]

In July 2011, 68 nations joined Bhutan in co-sponsoring its UN General Assembly resolution on "Happiness: Towards a Holistic Approach to Development".

On 2nd April 2012, at United Nations headquarters in New York, a historic event took place. At the invitation of the Royal Government of Bhutan, 800 distinguished delegates, including the President of Costa Rica, the United Nations Secretary-General, the Presidents of the General Assembly and Economic and Social Council, leading scholars, civil society and spiritual leaders, gathered to launch a new development paradigm designed to nurture human happiness and the well-being of all life on earth, based on a healthy balance among thriving natural, human, social, cultural, and built assets, and recognising ecological sustainability and the fair distribution and efficient use of resources as key conditions for the new model. As a result of this meeting, the Kingdom of Bhutan was also specifically requested to elaborate the details of the new development paradigm.

On the 28th July, His Revered Majesty, the King of Bhutan issued a Royal Edict to formally convene an International Expert Working Group and its Steering Committee, with members appointed individually. The outcomes and results of the Working Group were to be presented to the United Nations during the 68th and 69th Sessions of the Generally Assembly in 2013 and 2014. The current

---

[1] http://www.educatingforgnh.com/

report submitted to the 68th Session of the General Assembly in 2013 has been prepared by the Working Group on Happiness and Wellbeing, with the second report due to be submitted to the 69th Session of the General Assembly in 2014. The current report includes thorough literature reviews and examinations of existing best practices, to achieve a clear understanding on the actual, practical workings of the new paradigm and to provide practical suggestions on possible policies that can be put in place by governments around the world.

The second report will focus on the key conditions required to achieve the sustainable happiness goal, including the measurement and accounting systems required to assess sustainability, and the appropriate governance, resource, investment, financial, trade, and regulatory policies and mechanisms appropriate for such a development model.

Rationale

The adoption of a new global development paradigm is now widely acknowledged as an urgent necessity. The notion of progress in the modern world is tightly linked with the measure of Gross National Product (GDP), or the market value of all officially recognised goods and services produced within a country in a given period. The present GDP-based system was devised prior to any knowledge of climate change or the finite limits of the earth's resources. Regardless of the approach taken to estimate the GDP, it is fundamentally based on measuring *external conditions* of human existence, which are subsequently openly or inadvertently promoted as the ultimate good. It prioritises material growth and consumption — frequently at the expense of nature, people, community, and culture. This focus on external conditions and consumption translates into the continuous desire to possess more and more, often confusing the state of happiness and fulfilment with "having". Unfortunately, the "hedonic treadmill", or the well-known phenomenon of happiness adaptation, means there is no limit to the pursuit of materially-based gratification and, subsequently, to destroying the planet.

This present system, fuelled by consumerism, has depleted resources, degraded ecosystem services, accelerated greenhouse gas emissions, diminished biodiversity, and now threatens the survival of humans and other species on the planet. It has created yawning inequities, and is generating global economic insecurity, indebtedness, instability, and conflict. The system we have created is unsustainable for the planet, and is equally unsustainable for human happiness, because the goals promoted by the system (even if achievable) cannot and will not make the population happier.

At the same time, the world has never possessed greater knowledge, technical capacity, material abundance, and productive potential to create a sane, secure,

connected and socially and ecologically responsible global order to enhance human happiness and the well-being of all life, and to achieve all the necessary conditions for such a new global order. Humankind has the ability, for example, to feed everyone on earth healthily and sustainably, achieve harmony with nature and to shift the widespread emphasis from "having" to "being".

Perhaps most encouraging in this moment of life-threatening planetary crisis and malaise is the powerful surge of activity from civil society movements around the world — taking the lead where governments feared to tread, and giving courageous expression to humankind's basic goodness and inherent wisdom. This energy will and must generate the political will to act.

But while we are witnessing a growing consensus, clearly expressed in speech after speech at 2012 World Economic Forum, that the present global system is bankrupt, we as yet have no consensus on a clear, coherent, practical and detailed blueprint of the new development paradigm that must take its place. Fortunately, elements of this consensus are rapidly emerging and include the following key messages:

- In sharp contrast to the present GDP-based system, the new paradigm needs to enhance human happiness and the well-being of all life.
- The new development model must function within planetary boundaries, without degrading nature or depleting the world's precious resources.
- Those resources have to be distributed fairly and used efficiently.

There is an urgent need to explore how the new system will work in practice and what mechanisms, policies, and institutions are necessary to achieve these goals. The current document is an attempt to develop and describe such system, based on existing practices, as well as scholarly research and thinking.

Objectives

The objective of this report is to propose a detailed set of recommendations for public policy from the perspective of having sustainable happiness as one of the major policy goals of any government. It is therefore intended to:

- Contribute to a greater understanding and debate in relation to happiness as the underlying principle behind public policy;
- Strengthen awareness of the importance of the proposed happiness-based economic paradigm for wider goals and challenges in world (e.g., environmental challenges);

- Draw together emerging international research and practice across a number of disciplines;
- Make concrete and grounded recommendations for effective action;
- Highlight potential difficulties in implementing these recommendations.

Structure of the report

As the primary objective of this report is to detail multiple policy recommendations for the promotion of sustainable happiness, it is vitally important to define these terms. Therefore, the report commences with a chapter on the definitions of terms, including happiness, subjective and objective well-being, quality of life, collective and national well-being, as well as approaches to their measurement.

Despite worldwide enthusiasm for the creation of the new economic paradigm, the idea is sometimes met with criticisms threatening to undermine the collective effort necessary for its successful implementation. Thus two separate chapters has been included to explore and debate some of the prominent academic, media and other publically expressed objections to basing any public policies on happiness as an outcome measure (Booth, 2012; Diener et al., 2009), such as:

- Subjectively defined happiness captures irrelevant information.
- Happiness measures are short-term, transient and shallow measures of people's genuine well-being.
- Subjective happiness is relative and can be manipulated.
- Similarly to the documented failure of governments to control or directly affect GDP growth, it can be expected that any attempts to directly influence happiness growth will also fail.
- On the basis of recent empirical findings that happiness is related to income, it can be argued that the best way to increase happiness is indeed through the raise of GDP.
- Empirical findings that equality is related to happiness are based on limited or questionable evidence.
- Behavioural economics demonstrate that changing human behaviour is very hard to achieve.
- Government involvement in changing behaviour interferes with personal responsibility.
- Increasing government expenditure (through putting additional, happiness-based policies in place) may directly decrease the happiness of its citizens.

- Centralising governmental decision-making is likely to be perceived as intrusive, limiting autonomy and freedom, and, therefore, may have an inverse effect on the population happiness (fascist and communist societies).
- As the majority of means of achieving greater happiness are internal individual changes, the government has a very limited, if any, role in increasing the happiness of its population.
- Applying principles of utilitarian philosophy to the society as a whole may be very dangerous.
- Challenging the idea of progress used by the global community (the GDP) may destabilise the markets and cause dramatic negative changes in the living conditions.

The subsequent chapter addresses the importance and benefits of happiness. Research shows that happy people are likely to be friendlier, healthier, more cooperative, and better citizens. Furthermore, they are more likely to be successful and productive at work, and to earn more money. In other words, happiness leads to circumstances associated with a better quality of life. The benefits of happiness generalise to the societal level in that happy societies are on average healthier and have higher social capital. Therefore, it is essential for societies to monitor subjective well-being or "happiness" not only because the measures of happiness broadly reflect the quality of life in the society, including circumstances beyond money, but also because they assess a characteristic that helps the society function effectively. The chapter advocates that happiness can no longer be viewed as a luxury; for we now know it is essential for quality of life, whilst also being a crucial societal resource in producing good outcomes.

Main policy recommendations presented by this report are structured in accordance to the nine GNH domains that are used by the government of Bhutan to measure the happiness levels of its nation. The nine dimensions of GNH were selected on normative grounds and map specifically the key areas of GNH. These dimensions and therefore the corresponding chapters include:

1. Psychological well-being: Psychological well-being is an intrinsically valuable and desired state of being comprised of reflective and affective elements. Reflective indicators provide an appraisal of how satisfied people are in various aspects of their lives, while the affective indicators provide a hedonic evaluation guided by emotions and feelings.

2. Health: Health is often conventionally described as simply an absence of illness. However in Bhutan, health has always been associated with both physical health and mental health (Wangdi, 2009). This understanding conforms to the WHO's definition of health as 'a state of complete

physical, mental and social well-being and not merely the absence of disease or infirmity'. While physical and mental health is important, a holistic approach towards health would focus on social circumstances, emotional states and spiritual aspects. Good health provides an individual with an ability to meet life's opportunities and challenges and maintain a level of functioning that has a positive influence on well-being.

3. Education: GNH highlights the importance of a holistic educational approach that ensures citizens gain a deep foundation in traditional knowledge, common values and skills in addition to studying reading, writing, maths, science and technology. Creative learning and expression are also promoted.

4. Cultural diversity and resilience: The diversity of the culture is manifested in forms of language, traditional arts and crafts, festivals, events, ceremonies, drama, music, dress and etiquette and more importantly the spiritual values that people share.

5. Time use: The balance between paid work, unpaid work and leisure are important for one's well-being. Similarly, a flexible working life is vital for the well-being of individual workers and their families and communities. The value of time-use information lies in the fact that time is the ultimate resource and unlike other resources dependent on income or social status, time is shared equally by everyone. Further, time-use data is an important resource which brings into view voluntary work in communities and domestic work at home besides providing an overview of time spent in both the production and consumption of goods and services.

6. Good governance: Many definitions of good governance have been coined in literature, hence the relevant concept is particular to the vision and goals of the country and to the approach of governance being followed. In general, some of the key attributes are participation, rule of law, transparency, accountability, efficiency, effectiveness, responsiveness, a consensus orientation, equity, empowerment and inclusiveness.

7. Community vitality: From a GNH standpoint, a community must have strong relationships between community members and within families, must hold socially constructive values, must volunteer and donate time and/or money, and lastly must be safe from violence and crime. It is vital that volunteering and donations of time and money be recognized as a

fundamental part of any community development. Socially constructive values can act as tools through which activities can be implemented for positive change in communities.

8. Living standards: The living standards domain refers to the material well-being of people. It ensures the fulfilment of basic material needs for a comfortable living. The corresponding chapter discusses the relationship between Gross National Happiness (GNH) and Gross Domestic Product (GDP), including the background and the shortcomings of GDP as a welfare indicator. It considers the possibility of a healthy economy in the absence of economic growth and going on to outline the role of the economy and business in a GNH oriented society.

9. Ecological diversity and resilience: The environmental domain includes three subjective indicators related to perceptions regarding environmental challenges, urban issues and responsibilities. Perception of environmental issues in general and how they vary across time has long been of interest to researchers and policymakers; however, perceptions of environmental issues are affected by the extent to which people are informed on those issues.

Each of the nine principal chapters roughly adheres to the following format, although there are some considerable differences between chapters:

i. Domain
   a. Existing sub-domains: listing of the existing sub-domains measured by the GNH Index with a brief explanation as to the relevance of each sub-domain to the over-arching domain.
   b. Alternative sub-domains: Identification of potential sub-domains not covered by the Index.

ii. Intrinsic value of the domain discusses the extent to which it is an 'end-in-itself' and how it contribute directly to well-being. Considering well-being as a holistic and multidimensional state of flourishing, the analysis of the GNH Index indicates that these domains constitute our very sense of well-being. (2) For example, it is of intrinsic value to be in a state of health rather than pain, illness, or lack of energy. People value health, not

---

2 For example, analyse your own actions: why do I do what I do? How do my actions try to advance well-being? When you analyse, you will come to recognise a simple set of reasons that 'need no further reason' because they are of intrinsic value. Your list may be a bit different than the nine domains of GNH because the nine domains have to cover the diversity of humanity. But yours are probably not entirely different from these

'because it makes me happy' ('I can be unhappy and in good health'), but for its own sake. Similarly, feeling a part of a vibrant community with supportive relationships, friendships, peace, creativity, and safe space for discussions, is good in itself.

iii. Instrumental value of the domain: This section examines relationships between domains (and to happiness and well-being). For example, being healthy also means greater national productivity as people are not absent from work; being healthy means children can learn in school; being healthy means people have the time and energy to volunteer in their communities, and so on. Similarly, having an active community also is instrumental to many kinds of practical social support: if someone falls ill others will look after them; if they lose their job others will take care of them for a bit. If violence enters, the community will be able to resolve the problem by working together. Furthermore, research indicates, for example, that people who are satisfied with their community are also happier overall.

iv. Traditional public policy: While a single 'traditional' public policy simply does not exist, we can nevertheless explore how major international institutions and governments already frame each domain and seek to support it. This section intends to highlight the current state of affairs, its advantages and limitations. For example, in the case of health, sometimes public policy frames healthcare mainly as instrumental to worker productivity. In that case, the care for the elderly may be under-emphasized, as well as the care for the disabled, and even for the poor and uneducated. In contrast, an idea of universal healthcare does not position its benefits solely in terms of productivity. Traditional public policy may only regard community vitality from the perspective of low crime rates, and as a result, we witness loneliness, isolation, a lack of volunteerism or civic respect, and breakdown of communities around the world.

v. Major research findings of potential relevance to new public policy: Based on the current state of research we seek to identify the key 'unmet needs' that people have – e.g. for community relationships, or mental health care. Then we can ask what an appropriate and cost-effective role for public policy can be, identifying some key, high impact, feasible actions that are the 'low hanging fruit', but which would really make a big difference in people's lives.

vi. Recommendations: The main recommendations concern a) what not to do – which actions/policies need to be stopped or modified so as to 'do no

harm' and b) what to do – in so far as there are general prescriptions. This section often includes some examples of existing case studies, evaluated projects and novel initiatives.

vii.   Barriers to implementation: Of course, moving from the present to the future scenario cannot and will not be straightforward. The majority of proposed changes must be implemented incrementally and be presented and viewed within a broad context of transition towards social, economic and environmental sustainability. This section tends to identify and detail several possible barriers related to the implementation of each recommendation, including: key institutional barriers (from international policies and cultures; to the need for new ministries or businesses), political barriers (lack of political will; risk-aversion and fear of failure; will it win votes?); economic and financial barriers (high cost, or high uncertainty); human resource barriers; lack of advocacy (citizen demand is not articulated), etc.

viii.   Policy actions: Some of the chapters include word 'boxes' which profile key actions, addressing some of the 'barriers to implementation' above.

ix.   Data and measurement for policy: At present, many of the proposed changes would be 'invisible' because they would not affect GDP. What is required is a measure of GNH that would be sensitive to these interventions. This section details some recommended indicators, based on the Bhutan GNH Index for this domain, or otherwise.

x.   Monitoring: Related to the above, what else would be a sign of progress in this domain? What would need to be put in place to ensure an appropriate implementation and monitoring of relevant policies? Are there special bodies that may need to be created? This section is intended to consider indicators of public expenditure, private sector initiative, NGO activities and donor actions.

Unfortunately, even the most advanced set of public policy recommendations is unlikely to have any impact unless these recommendations are actually implemented both at the policy and individual level. The final chapter of the report considers public policies targeting individual-level changes in the light of most robustly researched contextual influences on our behaviour, putting across some suggestions about the way forward to achieve lasting behaviour change. The report concludes with summarising the next steps for elaborating the practical workings for the new development paradigm.

Sources of policy recommendations

The number of academic studies of happiness and its determinants has grown rapidly in the past three decades, resulting in a substantial amount of research on well-being undertaken by economists, psychologists, and other social scientists. Much of the current happiness data comes from aggregated self-reports of respondents to social surveys, such as World Values Survey (WVS), the European Values Survey (EVS), the Eurobarometer, the Gallup World Poll, the US General Household Survey (GSS), the International Social Survey Program (ISSP), the European Social Survey (ESS), the German Socio-Economic Panel (GSOEP), and the British Household Panel Survey (BHPS). However, despite proliferation in happiness research that allows us to confidently point out findings of relevance to public policy, the practical recommendations of what can be done to achieve a happy sustainable society are few and far between and are often hard to identify.

In order to ensure the comprehensibility of the current set of recommendations, an analytical framework was put forward to guide the search and development process prior to the commencement of the review (see Figure 1). This was done in order to ensure that we assess the usability of the recommendation sources in terms of accuracy, reliability and comparability. The dimension of *implementation* was proposed to ensure the inclusion of both existing/novel practices and theoretical ideas, whilst attending to the *evaluation* allowed the contributing authors to distinguish the evidence-based-practices and critically evaluated theoretical propositions from experimental/not yet evaluated practical policies and novel, theoretically based ideas put forward by this report.

| | | IMPLEMENTATION | |
		PRACTICE	THEORY
EMPIRICAL OR CRITICAL EVALUATION	ESTABLISHED	Q1. Existing policies and practices, in place and evaluated	Q2. Existing theoretical ideas published in either academic, spiritual or policy literature (papers, books, reports)
	NEW	Q3. New policies and practices, in place, but not researched or evaluated	Q4. Novel theoretical ideas developed for the purposes of this report

Table 1. *The analytical framework*

Quadrant 1 relies on existing policies and practices, already in place (implemented) and evaluated. These include academic and other published intervention research related to different domains of well-being, reports and findings from recent commissions of inquiry, 'grey' literature and evidence from voluntary and community based service providers on the costs and wider social impacts of different service delivery methods, government and other publicly available statistics (e.g. on the costs of service provision). The quality of evidence is of ultimate importance here, so information on controlled evaluations was included where possible.

Quadrant 2 draws on a wide range of existing theoretical ideas published in either academic, spiritual or policy literature (papers, books, reports, white papers, etc). Theoretical papers, empirical (though not intervention) papers, current policy documents, national strategies and outcome assessment were consulted as part of this group of sources.

Quadrant 3 concerns new policies and practices, in place, but not researched or evaluated. This quadrant relies mainly on case studies to provide illustrative examples of the current implemented policies and practices, explicitly or implicitly aimed towards well-being outcomes.

Quadrant 4 includes novel theoretical ideas developed for the purposes of this report, coming from the multidisciplinary perspectives of its contributors.

Although it could have been desirable to base this report solely on the existing evidence-based public policies that promote sustainable happiness, the scarcity of such policies call for a more inclusive and innovative approach to recommendation development. At the current level of happiness-centred policy development, sticking solely to the Quadrant 1 sources of recommendation would have been a considerable limitation.

Levels of policy recommendations

The report distinguishes between five different possible levels of recommendation on the basis of target or an application point for policy implementation, including individuals, groups/communities, businesses/organisations, central governments and international organisations, as follows:

Individual level

Most of scientific evidence derived from psychology and behavioural sciences focus on an individual' own actions, such as taking up physical exercise, spending more time socialising or engaging with a hobby, or deliberate changes in perception, such as focusing on the positive aspects of one's day, rather than

the negative ones. Importantly, as the bulk of the literature points towards the prevalence of internal over external conditions in achieving happiness, a substantial number of policies are selected on the basis of this premise. Recommendations at the individual level directly encourage individuals to change their attitudes and behaviour, targeting recipients of the message through actions such as public health campaigns, events and festivals, social marketing drives, literacy tools, healthy lifestyles advice and all other possible forms of education. So, understanding that it is an individual him/herself who has the greatest capacity to make transformation in their own lives, various information provision and knowledge transfer methods must be deployed to ensure that a set of actions that enhance an individual's personal well-being are made available to general population in a clear, engaging and motivating form.

Communities/local government level

The community category encompasses policies that may affect particular groups of people (e.g. a local mother and baby group) or organisations with a significant public-facing element (e.g. a social service department of a local authority). These are the policies that motivate or facilitate action on well-being within groups/communities, integrating the wider objectives of the sustainable happiness model into the design and delivery of initiatives with a local target and impact.

Businesses/organisations level

Within an organisation, decisions can be made that affect all employees, or all people who interact with the organisation (customers, suppliers, etc). Therefore, organisations could be encouraged to examine their processes and look for ways to increase opportunities for promoting sustainable happiness in the way that they deal with employees and clients, through integrating relevant considerations into existing systems, processes and activity to influence ways of working. This may include introducing flexible working or decreasing burden of commuting, for example. Although the individuals will be undoubtedly on the receiving end of these changes and will be affected by them, these policies themselves would be targeted at organisations.

Central government level

At a country-level, strategic decisions about economic, social, and environmental policy influence the background context within which people go about their daily lives. It is therefore deemed possible to enact policies affecting the whole population (or significant groups within it) with the explicit intention of promoting sustainable happiness, perhaps by restricting or mandating certain kinds of activity, or by incentivising and/or lifting barriers to certain decisions and behaviours (e.g. marriage, divorce, etc). Many policies on mental health (shifting from the emphasis on treatment to health promotion and preventative systems) are falling into this category.

International community level

However, there are situations where the principal actor is neither the individual, nor an organisation or a state-level policy-maker taking strategic decisions. The 2011 UN General Assembly resolution on "Happiness: Towards a Holistic Approach to Development" has encouraged the United Nations Member States to give more importance to happiness and well-being in determining how to achieve and measure social and economic development. World Health Organization already plays an important leadership role in gaining greater recognition of the potential benefits of a population wide approach to health as positively defined. Many countries across the EU are using the European commitment to 'mental health for all' to develop or strengthen national policy and action to promote mental well-being. These are some of the recent examples of policies at the international level.

Of course, some of the domains of the GNH lend themselves more easily towards one level of target, whilst others – to the other. For example, psychological well-being – to the individual level, education – to the communities' level, good governance – to the central government level, etc. Nevertheless, multiple crossings of boundaries should be seen as a norm rather than exception.

Theoretical foundations and the main themes of the report

According to empirical evidence (Lyubomirsky, Sheldon and Schkade, 2005), intentional activities at the individual level often offer the best potential route to higher and sustainable levels of happiness. Intentional activities are goal-directed actions or practices in which people can choose to engage, that usually require some degree of effort to enact. Several longitudinal studies by Sheldon and Lyubomirsky (2006) indicate that increase in happiness that is dependent on circumstances does not last as long as the one that results from intentional activity. Furthermore, research shows that high levels of goal progress or attainment predict increased well-being (Brunstein, 1993; Sheldon, 2002). However, this increase is most likely when the goals a person chooses and attains are self-concordant or congruent with oneself (Sheldon and Elliot, 1998; 1999; Sheldon and Kasser, 1995; 1998).

A wide range of studies in different activity domains (professional, clinical, educational, etc.) provide strong empirical support for the distinction between intrinsic an extrinsic motivation (Deci and Ryan, 2000). Intrinsic motivation takes place when an activity is enjoyable and subjectively valued by itself, rather than for its result. In this case a person maintains the activity for a prolonged time without any external incentives. Extrinsic motivation takes place when an activity is undertaken for the sake of obtaining rewards, either external or

internal (e.g., pride), or for the sake of avoiding punishments, either external or internal (e.g., guilt or shame). Extrinsically motivated activities therefore stop when the incentives cease. A wide range of studies show that whilst intrinsic motivation is associated with higher well-being and life satisfaction; extrinsic motivation is associated with lower well-being and life satisfaction.

Intrinsic motivation is facilitated by satisfaction of three basic psychological needs: the need for *autonomy* (making one's own choice), *competence* (the experience of success in what one does), and *relatedness* (the experience of being close to other people). They also show that environment can either support intrinsic motivation by providing opportunities for people to satisfy those basic needs, or support extrinsic motivation by controlling people using rewards and punishment (Deci and Ryan, 2000).

The extent to which different activities (work or leisure) are satisfying also depends on the content of goals at which those activities are directed. As Kasser and Ryan (1993) suggest, some goals (*intrinsic*, such as community contribution, health, personal growth, and affiliation) are more conducive to basic need satisfaction with resulting subjective experiences of meaning and happiness than other goals (*extrinsic*, such as fame, financial success, and physical appearance). Intrinsic goals are satisfying in their own right and more conducive for intrinsic motivation, as opposed to extrinsic goals that are undertaken for the sake of consequences external to the activity/task itself. However, an activity directed at extrinsic goals may be beneficial if it is instrumental for reaching intrinsic goals. For instance, when money is an end result of one's work (a 'having' orientation, in terms of Fromm, 1976), work may be psychologically detrimental to well-being, but when money is earned for the sake of an intrinsic goal (e.g., helping a charity), it becomes rewarding.

People focused on extrinsic goals are more social comparisons prone (Patrick, Neighbours and Knee, 2004; Sirgy, 1998), inclined to value contingent approval (Kernis, 2003) and strive for external signs of self-worth (Kasser et al., 2004). Strong extrinsic, relative to intrinsic, goals and aspirations lead to lower happiness, self-esteem, and self-actualization; higher depression and anxiety; poorer relationship quality; less cooperative behavior; and greater prejudice and social-dominant attitudes (e.g., Duriez et al., 2007; Kasser and Ryan, 1993; 1996; McHoskey, 1999; Sheldon and McGregor, 2000; Sheldon, Sheldon and Osbaldiston, 2000; Vansteenkiste et al., 2006). These results have been successfully replicated with various cultural and age groups (Vansteenkiste, Lens and Deci, 2006; Kasser and Ryan, 1996; Ryan et al., 1999).

Other approaches to the study of goal content show similar results. For example, Emmons (2003) demonstrates that there are three goal themes

empirically associated with higher well-being are *intimacy* ("goals that express a desire for close, reciprocal relationships"), *spirituality* ("goals that are oriented to transcending the self"), and *generativity* ("a commitment and concern for future generations"), whereas the presence of power ("goals that express a desire to influence and affect others") or financial strivings is associated with lower well-being. Happiness, or a good life, is simply not proportionate to the amount of money or power one has. Consequently, intrinsic and meaningful activities are rewarding and support happiness, whereas extrinsic activities drain us and lead to unhappiness.
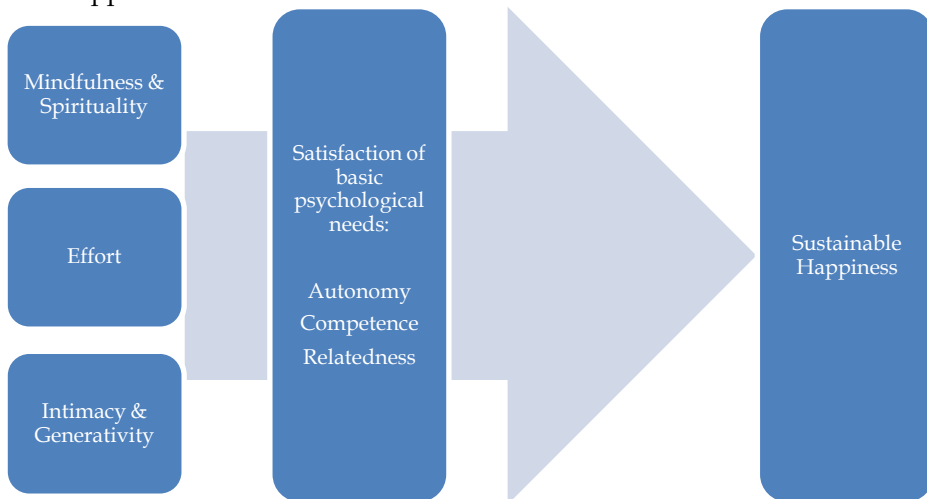
Figure 1. Theoretical foundations for policy recommendations

Sustainable happiness can thus be viewed as based on autonomous and self-determined action towards intrinsic goals guided by pro-social concerns (Figure 2). We therefore propose that the proposed policy measures would take the following theoretically-based themes into account:

A. Supporting autonomy/control. Providing citizens with more autonomy and control in different life domains encourages them to engage in consciously chosen activity, rather than that imposed upon them. It is vitally important that intrinsic goals cannot be imposed upon people (when people are forced to act even in accordance with intrinsic goals, the motivation is extrinsic and detrimental to well-being). Theoretical and empirical studies support policy measures aimed at providing more opportunities for people to act in accordance with intrinsic goals, giving citizens an option to use them or not. While the results of such policy may not seem immediately evident, it is the only sustainable way in the long-term, because it fosters autonomy in citizens.

One essential aspect of autonomy development is in supporting *mindfulness* and *spirituality* (which are the resources necessary for making choices) by providing time and encouraging people to reflect on their life and lives of other people, to devote time to choosing and evaluating their life goals, making them more self-congruent and congruent with larger interests.

B. Supporting relationships/relatedness. The second essential theme underlying the whole report is about helping people to find more and better opportunities to establish and maintain relationships, give and get social support in different life domains (family and wide community, work, unpaid work, etc.), which leads to higher experience of relatedness and higher well-being. Based on intrinsic goals of intimacy and generativity, relatedness is the primary thread of recommendations running through the whole report.

C. Supporting competence. Giving people, particularly those from disadvantaged groups (unemployed, retired, disabled) more opportunities to avoid feeling powerless and develop competence. A specific aspect of this is supporting effortful action, rather than passive consumption. An effort has to be made in order to feel one's ability to change something in oneself or in the world.

D. Supporting meaningful engagement. The policy measures at different levels can be aimed at supporting the importance of intrinsic, rather than extrinsic goals. This means providing people with more opportunities to engage into activities that benefit other people and planet as a whole, with social messages emphasizing universal human values, dedication to a cause rather than success, health rather than physical appearance, giving rather than having.

8. Conclusions and further directions

Evidence shows that above a certain level, economic growth does not produce an increase in human happiness; on the contrary, it appears that economic growth strategies in the world market economies have damaging effects on human and planetary well-being (Pickett, James and Wilkinson, 2006; Marks et al., 2006; Eckersley, 2005; 2006). This report argues that in the developed world, we have reached the limits of the benefits of affluence, demonstrates how consumerism promotes individual anxiety and undermines social solidarity, reveals the short- and long-terms costs of inaction and offers and elaborates on concrete action steps to confront the current artificial status quo and to promote true human happiness.

References

Babyak, M. A., Blumenthal, J. A., Herman, S., Khatri, P., Doraiswamy, P. M., Moore, K. A., Craighead, W. E., Baldewicz, T. T. and Krishnan, K. R., 2000.

Exercise treatment for major depression: Maintenance of therapeutic benefit at 10 months. *Psychosomatic Medicine*, 62, 633-638.

Booth, P. M. ed., 2012. *...And the pursuit of happiness*. London: Institute of Economic Affairs.

Brunstein, J., 1993. Personal goals and subjective well-being: A longitudinal study. *Journal of Personality and Social Psychology*, 65, 1061–1070.

Deci, E. L. and Ryan, R. M., 2000. The "what" and "why" of goal pursuits: Human needs and the self-determination of behavior. *Psychological Inquiry*, 4, 227–268.

Diener, E., Emmons, R. A., Larsen, R. J. and Griffin, S., 1985. The satisfaction with life scale. *Journal of Personality Assessment*, 49, 71–75.

Diener, E., Lucas, R., Schimmack, U. and Helliwell, J., 2009. *Well-Being for public policy*. Oxford: Oxford University Press.

Diener, E., Suh, E. M., Lucas, R. E. and Smith, H. L., 1999. Subjective well-being: three decades of progress. *Psychological Bulletin*, 125, 276–302.

Dolan, P., Hallsworth, M., Halpern, D., King, D. and Vlaev, I., 2010. *MINDSPACE: Influencing behaviour through public policy*. London: Cabinet Office.

Duriez, B., Vansteenkiste, M., Soenens, B. and DeWitte, H., 2007. The social costs of extrinsic relative to intrinsic goal pursuits: Their relation with social dominance and racial and ethnic prejudice. *Journal of Personality*, 75, 757-782.

Eckersley R., 2006. Is modern Western culture a health hazard? *International Journal of Epidemiology*, 35, 252-258

Eckersley, R., 2005. *Well & good: Morality, meaning and happiness*. 2nd ed. Melbourne: Text Publishing.

Emmons, R. A., 2003. Personal goals, life meaning, and virtue: Wellsprings of a positive life. In: C.L.M. Keyes, ed. *Flourishing: The positive person and the good life*. Washington, DC: American Psychological Association. (pp. 105-128).

Fromm, E., 1976. *To have or to be?* New York: Continuum.

Kahneman, D., 2011. *Thinking fast and slow*. New York: Farrar, Strauss, Giroux.

Kasser, T. and Ryan, R. M., 1993. A dark side of the American dream: Correlates of financial success as a central life aspiration. *Journal of Personality and Social Psychology*, 65, 410–422.

Kasser, T. and Ryan, R. M., 1996. Further examining the American dream: Differential correlates of intrinsic and extrinsic goals. *Personality and Social Psychology Bulletin*, 22, 280–287.

Kasser, T., Ryan, R. M., Couchman, C. E. and Sheldon, K.M., 2004. Materialistic values: Their causes and consequences. In: T. Kasser and A. D. Kanfer, eds. *Psychology and consumer cultures: The struggle for a good life in amaterialistic world*. Washington, DC: American Psychological Association. (pp. 11–28).

Kernis, M., 2003. Toward a conceptualization of optimal self-esteem. *Psychological Inquiry*, 14, 1–26.

Kopperud, K. H. and Vittersø, J., 2008. Distinctions between hedonic and eudaimonic well-being: Results from a day reconstruction study among Norwegian jobholders. *Journal of Positive Psychology*, 3, 174 – 181.

Lyubomirsky, S. and Lepper, H. S., 1999. A measure of subjective happiness: preliminary reliability and construct validation. *Social Indicators Research*, 46, 137–155,

Lyubomirsky, S., Sheldon, K. and Schkade, D., 2005. Pursuing happiness: The architecture of sustainable change. *Review of General Psychology*, 9, 111–131.

Marks, N., Thompson, S., Eckersley, R., Jackson, T. and Kasser, T., 2006. *Sustainable development and well-being: relationships, challenges, and policy implications.* A report by the centre for well-being, nef (New Economics Foundation) for DEFRA (Department of Environment, Food, and Rural Affairs.

McHoskey, J. W., 1999. Machiavellianism, intrinsic versus extrinsic goals, and social interest: A self-determination analysis. *Motivation and Emotion*, 23, 267–283.

Parkinson, J., 2006. *Measuring positive mental health: Developing a new scale.* Scotland: NHS Health Scotland.

Patrick, H., Neighbours, C. and Knee, C. R., 2004. Appearance-related social comparisons: The role of contingent self-esteem and self-perceptions of attractiveness. *Personality and Social Psychology Bulletin*, 30, 501–514.

Peterson, C., Park, N. and Seligman, M. E. P., 2005. Orientations to happiness and life satisfaction: The full life versus the empty life. *Journal of Happiness Studies*, 6, 25 – 41.

Pickett, K. E., James, O. W. and Wilkinson, R.G., 2006. Income inequality and the prevalence of mental illness: a preliminary international analysis. *Journal of Epidemiology and Community Health*, 60, 646-647.

Ryan, R. M. and Deci, E. L., 2001. On happiness and human potentials: A review of research on hedonic and eudaimonic well-being. *Annual Review of Psychology*, 52, 141-166.

Ryan, R. M., Chirkov, V. I., Little, T. D., Sheldon, K. M., Timoshina, E. and Deci, E. L., 1999. The American dream in Russia: Extrinsic aspirations and well-being in two cultures. *Personality and Social Psychology Bulletin*, 25, 1509–1524.

Ryan, R.M., Huta, V. and Deci, E. L., 2008. Living well: A self-determination theory perspective on eudaimonia. *Journal of Happiness Studies,* 9, 139-170

Samman, E., 2007. Psychological and subjective well-being: A proposal for internationally comparable indicators, *Oxford Development Studies,* 35, 459-486.

Sheldon, K. M. and Elliot, A. J., 1998. Not all personal goals are personal: Comparing autonomous and controlled reasons for goals as predictors of effort and attainment. *Personality and Social Psychology Bulletin*, 24, 546–557.

_____ 1999. Goal striving, need-satisfaction, and longitudinal well-being: The self-concordance model. *Journal of Personality and Social Psychology*, 76, 482–497.

Sheldon, K. M. and Kasser, T., 1995. Coherence and congruence: Two aspects of personality integration. *Journal of Personality and Social Psychology*, 68, 531–543.

_____ 1998. Pursuing personal goals: Skills enable progress but not all progress is beneficial. *Personality and Social Psychology Bulletin*, 24, 1319–1331.

Sheldon, K. M. and Lyubomirsky, S., 2006. Achieving sustainable gains in happiness: Change your actions, not your circumstances. *Journal of Happiness Studies*, 7, 55-86.

Sheldon, K. M. and McGregor, H. A., 2000. Extrinsic value orientation and the "Tragedy of the Commons". *Journal of Personality*, 68, 383–411.

Sheldon, K. M., 2002. The self-concordance model of healthy goal-striving: When personal goals correctly represent the person. In: E. L. Deci and R. M. Ryan, eds. *Handbook of self-determination research*. Rochester, NY: University of Rochester Press. 65–86

Sheldon, K. M., Elliot, A. J., Ryan, R. M., Chirkov, V., Kim, Y., Wu, C. and Sun, Z., 2004. Self-concordance and subjective well-being in four cultures. *Journal of Cross-Cultural Psychology*, 35(2), 209-223.

Sheldon, K. M., Sheldon, M. S. and Osbaldiston, R., 2000. Prosocial values and group assortation in an N-person prisoner's dilemma. *Human Nature*, 11, 387–404.

Sirgy, M. J., 1998. Materialism and quality of life. *Social Indicators Research*, 43, 227–260.

Stewart-Brown, S., Tennant, A., Tennant, R., Platt, S., Parkinson, J. and Weich, S., 2009. Internal construct validity of the Warwick-Edinburgh Mental Well-being Scale (WEMWBS): a Rasch analysis using data from the Scottish Health Education Population Survey, *Health and Quality of Life Outcomes*, 7, 15 - 22

Thailer, R. H. and Sustein, C. R., 2009. *Nudge: Improving decisions about health, wealth and happiness*. London: Penguin Books.

Ura K., Alkire S., Zangmo T. and Wangdi K., 2012. *A Short Guide to Gross National Happiness Index.* Thimpu: Centre for Bhutan Studies.

Ura K., Alkire S., Zangmo T. and Wangdi K., 2012. *An Extensive Analysis of GNH Index*. Thimpu: Centre for Bhutan Studies.

Vansteenkiste, M., Duriez, B., Simons, J. and Soenens, B., 2006. Materialistic values and well-being among business students: Further evidence for their detrimental effect. *Journal of Applied Social Psychology*, 36, 2892-2908.

Vansteenkiste, M., Lens, W. and Deci, E. L., 2006. Intrinsic versus extrinsic goal contents in self-determination theory: Another look at the quality of academic motivation. *Educational Psychologist*, 41(1), 19-31.

Vittersø, J., Overwien, P. I. and Martinsen, E., 2009. Pleasure and interest are differentially affected by replaying versus analyzing a happy life moment. *Journal of Positive Psychology*, 4(1), 14-20.

Wangdi, K., 2009. Health. In: *Gross National Happiness Survey Findings 2007-2008.* Thimphu: Centre for Bhutan Studies. 80-111.

Watson, D., Clark, L.A. and Tellegen, A., 1988. Development and validation of brief measures of positive and negative affect; The PANAS scales. *Journal of Personality and Social Psychology*, 54, 1063–1070

Chapter 2: Definitions of Terms

— Alejandro Adler, Ilona Boniwell, Evelyn Gibson, Thaddeus Metz, Martin Seligman, Yukiko Uchida and Zhanjun Xing

Introduction: Happiness - What is meant by the term?

The primary objective of this report is to detail multiple policy recommendations for the promotion of happiness in light of Bhutan's Gross National Happiness (GNH) index, with the aims of this chapter being to define this term, to analyze its various facets, and to discuss some ways in which it has been measured in studies and potentially bears on political decision-making.

This chapter begins by defining what is meant by 'happiness' for the sake of the report (sec. 1), which is more or less what people mean by 'well-being'. Next, it takes up the standard distinction between subjective and objective conceptions of well-being, noting that the dominant view among the Bhutanese and contributors to this report is that both sorts are relevant (sec. 2). Then, it notes an additional distinction among types of well-being, between well-being as a 'time-slice' of a life, to which the subjective/objective distinction most readily applies, on the one hand, and as a narrative pattern in life or how it develops over time, on the other (sec. 3). The following topic concerns whose well-being it is that is under consideration, where this could be either the well-being of an individual, an animal or even a group such as a family or community (sec. 4), after which the issue of how to measure well-being is addressed (sec. 5). The chapter concludes by briefly indicating how these various dimensions of happiness figure into policy discussions encountered in the rest of this report about GNH (sec. 6).

End in itself v. means.

Happiness was famously analyzed by Aristotle as being the sole ultimate goal of human existence, meaning that he viewed it the only thing important in its own right, not merely as a means to an end. Regardless of whether Aristotle is correct that happiness is the only end in itself, it is at least one important end for human beings and other life forms. Whereas money and technology, for example, are mere tools, i.e., useful solely as a means to some, further thing (as is economic growth, discussed in the chapter 'The power of GDP and its limitations'), happiness in contrast is by definition something good for its own sake. Of course, happiness can *also* be useful, and, indeed, below the report points to respects in which happiness brings additional goods in its wake. The key point, though, is that whatever happiness is, it is something that is desirable in itself, and not *merely* as an instrument to acquire something else.

'Happiness', 'well-being', 'the quality of life'

To many, particularly Western, ears, talk of 'happiness' connotes something individualistic and 'mental', for instance, a hedonic state in which a single person feels pleasure or contentment. However, that is not what contributors to this report and friends of GNH generally mean by the word. Drawing on more Eastern senses of 'happiness', as well as Aristotle's own understanding of the term and the 'eudaimonic' perspectives of contemporary psychology, in this report talk of 'happiness' is meant to be broad, signifying *everything that makes a person's life that goes well*. Furthermore, as is discussed below, many contributors believe that the happiness of animals also matters for its own sake, beyond whatever influence it might have on people's happiness.

Equivalent terms for the happiness of organisms generally, then, are 'well-being', a 'high quality of life' and perhaps a 'flourishing existence'. And the opposite of the happiness of life-forms is well captured by terms such as 'harm', a 'poor quality of life', and a 'stunted existence'. As is discussed below (sec. 2), from the perspective of GNH, happiness includes not only 'mental' facets such as pleasure, but also includes more 'objective' dimensions such as meeting needs and, in the case of persons, being compassionate, realizing oneself, exhibiting virtue and obtaining meaning in life.

Subjective and objective conceptions: To what extent is a good life a function of mental states or of certain states of being and functioning?

In the philosophical, psychological and related literature on personal happiness (well-being), it is common to differentiate theories of it in light of the degree to which it is thought to be a function of positive mental states. According to subjective theories, well-being is solely a positive state of mind, typically a matter of feeling pleasure and judging one's life to be satisfactory. In contrast, objective theories maintain that well-being is not merely mental and is constituted, for instance, by conditions such as exhibiting good character, having a family, or making important achievements.

Subjective well-being.

The notion of subjective well-being (SWB) is currently the dominant conception of happiness in psychological literature. SWB is currently considered to be a multidimensional construct, referring to distinct but related aspects that are often treated as a single property called 'happiness'. Specifically, SWB these days tends to encompass how people evaluate their own lives in terms of both affective (how we feel and emote) and cognitive (what we think) components of well-being (Veenhoven, 1994; Diener et al., 1999). Overall, high SWB is seen to combine: frequent and intense positive affective states, the relative absence of negative emotions, and satisfaction with one's life as a whole.

One way to understand SWB as a combination of affective and cognitive aspects is to construe it as an *experience*. Subjective well-being can be seen as a positive psychological experience of one's state of existence and development that is not a mere emotional flash, but is instead a stable, hedonic mood arising from conscious or unconscious judgment. The feeling or affective side of experience is a pleasant state of mind, perhaps one of enjoyment, whereas the judging or cognitive side is a matter of deeming one's life to have achieved a certain standard. From this perspective, SWB is a matter of positive experiences about various aspects of one's life, including the experiences of: abundance, mental and physical health, progress, autonomy, self-acceptance and relationships (Xing, 2013).

SWB is not only good in itself, but has also been linked to many positive outcomes for mental and physical health, as well as improved interpersonal relationships and better community integration. For example, individuals with higher levels of SWB have been shown to have stronger immune systems (Stone et al., 1994), to live longer (Ostir et al. 2000), to suffer from lower levels of sleep complaints (Brand et al., 2010), to exhibit greater self-control, self-regulatory and coping abilities (Fredrickson and Joiner, 2002), and to be relatively more cooperative, pro-social, charitable, and other-centred (Williams and Shaw, 1999). (For more thorough discussion, see the chapter 'Psychological well-being'.)

Note that the above understanding of subjective well-being is a typically Western construal, one that is arguably too limited to capture everything that is subjective about well-being, at least from the Bhutanese perspective of GNH. For one, many in the Buddhist and more generally meditative traditions would suggest that part of subjective well-being is a detached state of mind in which one does not judge, and, especially, does not judge how well one's life is going. It is an interesting question how detachment, related attitudes such as acceptance, as well as other 'spiritual' orientations might square with the positive judgment (or 'life satisfaction') element that is taken for granted in Western analyses of SWB. Perhaps it is fair to say that *to the extent that* judgment is constitutive of well-being, it should be positive judgment, thereby leaving room for disagreement about how much judgment there should be.

The positive judgment facet of dominant understandings of SWB is not the only one that is questionable in light of GNH; so is the positive affect element. Consider that insofar as one is better off for being a loving person, where love involves sympathetic reactions toward others' pain, it appears that one can sometimes be better off, to some degree, precisely for feeling bad that one's beloved is not well. If one did not have negative mental reactions toward others' woe--as the psychopathic fail to do--then, although one might feel more

pleasure, one would be in a major respect subjectively worse off, so many Bhutanese would plausibly suggest. Self-regarding pleasure is one element of subjective well-being, but other-regarding attitudes are as well.

Failure to capture everything subjective about well-being is one concern about the dominant interpretations of SWB, but note a further point: it is unlikely that subjective considerations, however understood, capture everything about well-being. No matter how broadly construed, subjective well-being cannot account for the complexity of philosophical conceptions of a life that goes well, long-standing ideas of humanistic and existential schools of psychology, as well as many laypeople's ultimate goals.

For example, public policy aimed only at subjective well-being is vulnerable to the *Brave New World* caricature: 'just drug them into contentment (or even compassion) with *soma*'. It also stumbles on the fact that human beings persist in having children. Substantial evidence indicates that couples without children can expect to be subjectively happier than childless couples (Senior, 2010); professional, married couples without children are the most psychologically well off. For a final example, to judge the quality of relationships, we need to know not merely what you think about the quality of your marriage and how you experience it, but also what your spouses and children think about it, as well as the objective frequency of arguments, cooperative behaviour and sexual relations.

The upshot is that well-being does not exist just in one's own head, at least from the standpoint of adherents to GNH, which includes not merely psychological well-being as part of its index, but also categories such as community vitality, health and education, the value of which is not merely instrumental and cannot plausibly be reduced to pleasure or anything subjective. A teacher naturally wants his students to enjoy learning, but she also wants them to learn even if doing so must come at the cost of enjoyment.

Objective wellbeing

The most salient objective approach among psychologists is the 'eudaimonic', or self-realization, paradigm, where well-being is construed as an on-going, dynamic process of effortful living by means of engagement in *activities* perceived as meaningful (e.g., Ryan and Deci, 2001). Advocates of this approach maintain that living a life of virtue, understood as developing the valuable parts of one's human nature, or actualizing one's inherent potentials in the service of something greater, constitutes the good life for an individual (Boniwell and Henry, 2007; Delle Fave, Massimini and Bassi, 2011). From this perspective, positive experiences are not in themselves important for a good life, and are

relevant only insofar as they involving appreciating objectively worthwhile ways of being or functioning.

There have been different approaches to defining eudaimonia in the field of positive psychology, with researchers identifying a number of different aspects of self-realization such as: personal growth, meaning in life, purpose, autonomy, competence, mindfulness, self-acceptance, authenticity, values congruence, social connectedness and self-regulation (Baumeister and Vohs, 2002; Kashdan, Biswas-Diener and King, 2008; Huta and Ryan, 2010; Osin and Boniwell, 2012).

Other conceptions of well-being are objective but not strictly eudaimonist; they focus less on the central idea of self-realization and instead, often, on a plurality of ways of being and functioning. For example, according to some research about what people across the world seek out for its own sake, final ends include those of: engagement, which means being absorbed by an activity; interpersonal relationships; meaningful activity; and achievement at a career, hobby or some other project (Seligman and Adler, 2013). In addition, philosophers routinely offer what they call 'objective list theories' of, or 'capability approaches' to, the good life (Nussbaum, 2011). It has been argued that many elements of these views can be placed under the three classic headings of 'the good, the true and the beautiful' (Metz, 2013a). From these perspectives, a life goes well insofar as one directs one's intelligence toward: 'goodness', i.e., helping others in the form of, say, loving a family, working for a charity, being employed in a caring profession, participating in a group oriented toward a shared goal; 'truth', which means informedly reflecting about society, nature, the universe or oneself, perhaps by obtaining a formal education or maybe just by reading on one's own or conversing with others; and 'beauty', which is shorthand for creativity by, for instance, making art-objects, interpreting an artwork, decorating a room, taking care of a garden or expressing humor.

GNH appears compatible with a wide array of theoretical approaches to well-being (as is discussed in the chapter 'The desirability of sustainable happiness as a guide for public policy'). It does not suggest any one basic perspective by which to unify its eight objective domains of education, governance, cultural diversity, health, living standards, environment, community vitality and time use. However, it is worth noting that these facets emerged from a largely Buddhist worldview, and other societies might favour different dimensions. Furthermore, even if cultures were to share all the same dimensions, they might assign different weights to them. Individuals in independent, typically Western, cultural contexts are largely motivated to seek happiness through autonomous agency (Markus and Kitayama, 1991), whereas, in many East Asian cultural contexts, happiness tends to be construed in terms of interpersonal connectedness or balance between the self and others (Uchida, Norasakkunkit

and Kitayama, 2004). It is common to differentiate between a 'personal achievement orientation' and a 'relationship orientation', with many cross-cultural studies using this approach.

Recent work in psychology suggests that, at least among Westerners, believing that one's life has meaning and is a product of one's autonomous decisions is associated with: greater levels of a variety of positive feelings such as hope and satisfaction; better physical health; lower levels of stress; lower levels of drug addiction and dependence; and reduced incidence of depression (Baumeister, 1991). Among Asians, the following are highly predictive of positive experiences: factors such as the attainment of interpersonal goals (Oishi and Diener, 2001); positive relational emotional experiences (Kitayama, Mesquita and Karasawa, 2006); fulfilling relational norms (Suh et al., 1998); and harmony (Kwan, Bond and Singelis, 1997).

The contributors to this report believe, with the approach of GNH, that the best life, the one most worth pursuing, includes both subjective and objective elements. Well-being is plural, and not monistic: there is no one final-common-path. Useful understanding of well-being for public policy should be a 'dashboard' of subjective conditions of positive feelings and self-appraisal, and probably additional conditions such as spiritual dispositions and loving emotions, along with more objective conditions such as virtues, relationships and accomplishments. This report does not provide a single theory of well-being, but rather appeals to various elements discussed in this section that will be widely attractive as salient in a given context.

Aggregative and narrative conceptions: To what extent is a good life a sum of desirable segments or a pattern over time?

Another distinction with regard to well-being concerns what might be called its 'bearer', i.e., what it is about a person's life that is either going well or poorly. According to the dominant perspective, a life goes well insofar as its separate parts do. The more good parts, i.e., the greater their sum, the better the life. However, recently psychologists and philosophers have been arguing that although this might exhaust well-being for animals, it does not for persons, who are capable of viewing their lives as a whole. Human well-being is also a matter of how the parts of a life are ordered or related to one another; living a certain kind of life-story also tends to matter to people.

Aggregative views

Both the subjective and objective conceptions of well-being (analyzed in sec. 2) suggest an aggregative view of what makes a life go well. According to subjective well-being, a life goes well, the more its parts exhibit positive experiences; roughly, the more pleasant feelings and approving judgments, the

better the life. Similar remarks go for a typical objective conception: a life goes well, the more its parts exhibit goods such as self-realization, relationships, knowledge, health and the like.

Few would deny that the quality of a life is substantially a matter of *how much* subjective and objective goodness is in it. However, it is probably not the whole story. For example, psychological studies show that, upon judging past events in their lives, people tend to appraise their value not so much in terms of the sum of the goodness of their parts, but largely in terms of their *pattern*, and, in particular, whether they 'ended on a high note' or not (Khaneman, 2011).

Narrative views

According to these perspectives, whether a life goes well depends in some respect on how its parts are ordered or on how the life develops over time. Here are four salient ideas from the literature, which are ordered developmentally (Metz, 2013b, ch.3).

First, few people want their lives to be repetitive. Even if the parts of a very repetitive life were quite desirable in themselves, full of subjective and objective elements, most people would sacrifice some goodness in the parts in order to avoid repetition in the pattern.

Second, there is the idea that it would be better for a life, which has different kinds of parts, to end on a high note than to have started out good and then declined. Holding constant the sum of part-life facets, it is better for one's life to get better over time than to get worse.

Third, some maintain that, supposing one's life has better and worse parts and the better parts come later, it would be ideal for the comparatively worse parts of a life to have brought about the better ones. That is, many people want to redeem the bad parts of their lives by making something good come of them.
Fourth, there is the view that, supposing the worse parts of one's life have caused better parts toward its end, it would be better for the latter parts to have been caused in a particular manner, say, either by a process of personal growth or in a way that would make for a readable biography.

It is not clear how these four facets of well-being might figure into socio-economic development policies, although one natural suggestion is to ensure that the elderly are not left to watch television in a nursing home. On the face of it, societies ought to work to ensure that older generations are afforded substantial opportunity to engage with and to enrich younger ones.

It might be, however, that these narrative judgments about the desirability of an upward slope in the progress of a life are culturally limited. In one study, Chinese and American participants were presented with graphs representing either a linear or nonlinear trend, and asked them to indicate which graph best represents the change in their happiness they predict over their lifespan (Ji, Nisbett and Su, 2001). Chinese respondents were more likely to choose a nonlinear graph, while Americans were more likely to choose a linear graph. Although this study enquired into what people expected would happen, and not what they wanted to happen, it could be that expectations are tracking hopes.

A complete conception of well-being would probably include both aggregative and some kinds of narrative elements, so that an individual should keep both in mind when considering how to live. However, a large majority of the contributions to this report focus on the former, as it admits of public policy applications more readily than the latter.

Individual and collective conceptions: Whose wellbeing matters, that of an individual or that of the group?

So far, the discussion has focused on the happiness of an *individual*. However, some thinkers, cultures and societies suggest that there are additional 'lives', namely, those of certain *groups*, that can go better or worse and that should be taken into consideration when developing public policy. The most common suggestions are families, communities and nations.

Individual well-being

A large majority of literature on well-being addresses that of an individual human being. Goods such as positive experiences, self-realization, meaningful activities, relationships and the like are naturally understood to be things that individuals can either have or lack. And although there is less literature among philosophers and psychologists about animal well-being, it tends to be construed either in hedonic terms, as a matter of feeling pleasure and avoiding pain, or as the meeting of biological needs.

Now, many would agree that it makes good sense to speak of a 'dysfunctional family' and a 'sick society', or of a 'happy family' and a 'flourishing society'. Is a group bad merely insofar as it bad for individuals or composed of badly off individuals? Conversely, is a group good merely to the extent that it enhances the quality of life of individuals or is constituted by well off individuals? According to some traditions, the correct answer to these questions is 'no'; groups can be better or worse off *as groups*, to some degree apart from how well off individuals are within them. From this holist perspective, we should also speak of 'collective well-being'.

Collective wellbeing

Consider some respects in which it seems possible for groups to be good in themselves or for groups to be doing better or worse. Think, first, about a nation or a people as something that is worth protecting for its own sake. A major architect of the United Nations' Convention on the Prevention and Punishment of the Crime of Genocide appears to have thought that genocide was a violation of the right of a nation to exist, where a nation 'signifies constructive cooperation and original contributions, based on genuine traditions, genuine culture, and a well-developed national psychology. The destruction of a nation, therefore, results in the loss of its future contributions to the world' (Lemkin, 1944). Similarly, there is the African (Banjul) Charter on Human and Peoples' Rights, which accords peoples moral and legal claims to self-defence and to natural resources, among other things.

For another example, think about the family. Obviously, what makes a family good in large part is that it benefits its members, is good for them. However, it is also plausible to think that the kinds of interaction inherent to a well-functioning family are also good for their own sake. *Relationships* in which people identify with each other, or share a way of life, and in which they exhibit solidarity with each other, or care about their quality of life, are arguably something to prize, apart from their consequences for the quality of individual lives.

Note that a concern for collective well-being, and specifically for harmonious relationships, would make good sense of a concern for the *distribution* of well-being in society (Uchida, 2013). Those sympathetic to equal distributions, or at least not grossly unequal ones, might think that a more egalitarian *society* is better than a more inegalitarian one.

An extreme version of the collective view would be that only groups are valuable, with individuals serving merely as a means to them. However, such a viewpoint is rare, and much more commonly one finds the view that if collective well-being is important, it is something to be balanced against individual well-being, which is most important. In any event, the contributors to this report focus in the first instance on individual well-being, but, to the extent that they are concerned with the pattern of distribution of goods across a society, they could be understood to be interested in social well-being, too.

Measuring well-being: How can we know whom is doing well?

It might seem impossible to measure many of the purported goods discussed above. How can one quantify, say, love? And if cultures differ with regard to the weights they assign to various goods, can one sensibly say that one culture

is on balance happier than another? There are difficulties, but social scientists have often overcome them when studying at least personal and national well-being.

Measuring personal wellbeing

One natural strategy to determine whether someone has been happy, at least subjectively, is to ask her. However, studies have shown that individuals frequently misrepresent their past subjective experiences. In some studies, participants were asked to provide a continuous indication of the hedonic quality of their experience in real time. At the end of the experiment, they were asked to evaluate their experience as a whole, and the retrospective evaluations tended not to reflect the real time judgments (Kahneman, 2011, pt.5). For one, participants tended to place disproportionately great emphasis on the last part of the experience, and, for another, post-experience reports tend to be influenced by respondents' current moods and immediate contexts.

To avoid this kind of problem, some psychologists use brain scans to determine whether people are actually feeling a certain way. More often, however, social scientists measure (subjective) well-being in real time. What is called the 'experience sampling method' systematically obtains self-report data about participants' everyday lives at many points in time, to obtain reports of real time experiences in natural settings, outside of a laboratory (Stone and Shiffman, 1994). This methodology might involve participants recording their feelings on a computer at several different points throughout the day, or receiving phone calls at various times from an enquiring researcher.

Whereas the above techniques focus in the first instance on people's feelings, others instead address their judgments, with 'life satisfaction' being a central indicator (Linley et al., 2009). Life satisfaction represents an individual's appraisal of his own life. People report high level of life satisfaction when there is little or no discrepancy between their current circumstances and what they think is an ideal or deserved situation. Although a person's happiness levels can fluctuate over time in response to changing circumstances, trauma or crises, there is a tendency for levels of overall life satisfaction to return to a fairly narrow range (Diener et al., 1999).

Individual judgments of happiness are largely influenced by cultural meanings and values within each nation or culture, and so what makes people subjectively happy will vary from society to society (and even individual to individual) (Uchida, 2013). In addition, it is well known that an individual's judgment of how well he is faring is often a function of comparing himself to a group with which he identifies, so that even if their group is doing very well in absolute terms, people will judge themselves not to be well off if they are not

the 'top dog' in their group. In addition, it should be noted that life satisfaction ratings may be influenced by social desirability factors, e.g., admitting one is unhappy with life could be akin to admitting failure.

Consider now another major technique, beyond retrospective reporting, the experience sampling method and life satisfaction. Often it is possible to use random assignment, placebo-controlled studies. First, people are randomly assigned to receive a certain treatment and others to a 'control group' that does not receive it. Next, a researcher ascertains whether those given the treatment do noticeably better than those who did not get it. If so, then there is some good evidence that the treatment is the cause of the improvement. The same basic, experimental logic holds for testing exercises that purport to increase well-being. So, for example, it has been found that those who set aside ten minutes before they sleep to recall what went well for them and why feel better and are less depressed than those who do not (Seligman et al., 2005). It has been suggested that this sort of technique can also be used to measure objective conditions such as relationships, meaningful activities and achievements (Seligman et al., 2009).

Most of the above measurements are of subjective well-being, with ways of sizing up objective well-being being less salient in the literature. However, take the case of how to measure love. If one believes that love is largely an emotion, i.e., fairly subjective, then there are readily available techniques for capturing its intensity, e.g., with the affect intensity measure, a 40-item questionnaire that assesses the characteristic strength or intensity with which an individual typically experiences her emotions, distinguishing between frequency of emotional experiences and their intensity (Larsen, Diener and Emmons, 1986). However, if one plausibly thinks of love more objectively, as a certain kind of relationship or interaction, one could also determine how strong or weak an instance of it is, at least in comparison to others. How often does a couple fight? How often do they choose to make love? How often do they go out of their way for each other? How often do they reveal their innermost thoughts? How often do they engage in shared activities? How often do they use the word 'we' as opposed to the word 'I'? In principle, one could measure these and related factors, sum them up, and arrive at a kind of score.

It is commonly pointed out that the quality of an individual's life is strongly correlated to the quality of his relationships. Hence, if one has measured the strength of a family's bonds or a person's interpersonal interaction generally, then one can probably predict how well-off he is.

Measuring collective (family and community) wellbeing

In order to measure family and community well-being, conceived as the sum of the well-being of their members, it would of course be useful to ask individuals about how they view their lives and then aggregate the results. And even for more strictly collective understandings of well-being, as groups that can be better or worse off apart from their members, it would be useful to ask individuals about how they assess their relatedness with family and community.

However, if it is indeed true that relationships themselves can go better or worse, apart from how the individuals in them are faring (as per 4.2), then one should try to measure the quality of relationships directly, requiring one to set a unit of analysis for family and community as such. For example, suppose that a desirable relationship is a loving or at least sympathetic one, where one person's happiness is dependent on others' happiness. In that case, a researcher could measure the extent to which the flourishing of others is mirrored psychologically in a given person and, similarly, the extent to which this person feels bad consequent to others' floundering. For another example, if a quality relationship is one in which people substantially engage in communicative action with one another, orienting their behaviour consequent to mutual understanding (Habermas, 1987), then a researcher could measure that degree of interaction compared with isolating times standing in a queue, driving in a car, engaging with an electronic gadget or following orders.

Measuring national wellbeing

Over the past several years there has been a shift away from defining a country's standing in purely financial terms, i.e., GDP or GNP, to measures of a nation's well-being that focus less on general purpose means such as money and, instead, more on desirable final ends. The GNH approach of course places these ends in themselves under the heading of 'happiness' (or 'well-being'). Note that the word 'nation' in the context of national well-being does not usually mean a group as something distinct from its members (as in the previous section, 5.2), but is instead normally the sum (or some other distribution) of the quality of individual lives.

A number of measures have been proposed that aim to measure national or societal happiness by focusing on quality of life rather than wealth (for an overview, see Veenhoven, 2007). Some policy makers advocate for aggregated measures of subjective well-being to be the *only* way of evaluating policy and progress, whereas others stipulate that human well-being depends on a range of objective functions and abilities each of which needs to be measured and which cannot, in general, be aggregated into a single measure. Since most contributors to this report believe, with GNH, that well-being has both subjective and

objective well-being, both kinds of measurement at the national level are appropriate.

As discussed elsewhere in this report, the level of income is both relatively unimportant and relatively transitory for at least subjective well-being, compared with family circumstances and unemployment. For example, longitudinal data has shown little long-term relationship between a nation's income and its average level of life satisfaction (Easterlin, 1995). Some maintain that more income improves happiness only until basic needs are met, e.g., adequate food and healthcare (Veenhoven, 1991). Factors that have been shown to substantially contribute to the long-term subjective happiness of nations include health (Easterlin, 2003) and employment and marital status (Blanchflower and Oswald, 2004).

The life satisfaction approach is also a promising method, and has been used to value a number of large-scale, public bads such as air pollution (Luechinger, 2009), droughts (Carroll, Frijters and Shields, 2009) and flood hazards (Luechinger and Raschky, 2009). (For more examples, see the chapter 'Subjective well-being measures to inform public policies'.) A related tack is that of the World Health Organisation (WHO), which conceives of quality of life in terms of an individual's perception of her position in life in the context of the culture and value systems in which she lives and in relation to her goals, expectations, standards and concerns. It includes the person's physical health, psychological state, personal beliefs, social relationships and their relationship to salient features of their environment. WHO has developed two instruments for measuring the quality of life, the WHOQOL-100 and the WHOQOL-BREF, which can be used in a variety of cultural settings whilst allowing the results from different populations and countries to be compared.

As for resolutely objective national measures, the Human Development Index (HDI) is currently a prominent rival of GDP. It is based on the capabilities approach developed by Amartya Sen (1999) and integrates health, education, and economic affluence into a human development framework. Another index, the Inequality-Adjusted HDI (I-HDI) was introduced following criticisms that HDI scores do not take into account the way in which health, income, education and the like are distributed across the population of a country.

An additional objective measurement is of course Bhutan's Gross National Happiness (GNH) Index, which has been in use for decades and is defined by the government of Bhutan this way: 'Gross National Happiness measures the quality of a country in more holistic way [than GNP] and believes that the beneficial development of human society takes place when material and spiritual development occur side by side to complement and reinforce each

other' (quoted in Ura et al., 2012, p.7). As analyzed in this chapter, there are nine dimensions of GNH: psychological well-being, health, education, culture, time use, good governance, community, living standards and ecology. A single index is developed from 33 indicators categorized under these nine domains. However, policy makers have much more information at their disposal than simply one numerical score, and can use data available for each of the nine domains in 'dashboard' fashion.

For a final example, consider the Better Life Initiative, which includes number of well-being indicators along with a composite index. It distinguishes between material living conditions (income and wealth; jobs and earning; housing) and quality of life (health status; work and life balance; education and skills; civic engagement and governance; social connections; environmental quality; personal security; and subjective well-being). These eleven life domains are then weighted to produce a single score, if such is desired.

Above it was noted that different societies assign different degrees of importance to various objective goods. Some prize autonomous achievements more than interdependent relationships, and vice versa. How can international comparisons be made in light of such reasonable disagreements about priorities? One option is to evaluate national happiness along two different dimensions, one that is invariant across societies and one that is sensitive to local values. Examples of the former, standardized approach include the I-HDI and the OECD's Better Life Index, whereas Bhutan's GNH, grounded in this country's Buddhist traditions, might be a good instance of an indigenous index.

Another factor to keep in mind when comparing the well-being of various nations is the influence of cultural factors on the ways people respond to surveys. For a first issue, there are response biases, e.g., Asians prefer to use a middle point while Americans prefer to use an extreme point on a Likert scale (Chen, Lee and Stevenson, 1995). A second concern is the reference group effect, by which people judge themselves based on others nearby, meaning that people's judgments in each nation will tend to vary with their local reference point (Heine et al., 2002). Third, consider that what counts as 'optimal happiness' varies substantially across cultures. For example, in Japan, the ideal level of happiness is not a '100% happy situation'; instead, people judge that around 75% is ideal. These considerations suggest being wary of a single global model by which to measure happiness in different societies (Uchida, 2013); investigating the meaning of happiness within each cultural context might be most productive.

Lastly, when measuring national well-being, it is important for policy-makers to keep in mind not merely how well off individuals within the nation are as a

sum, but also several distributive factors, of which here are three. First, should the nation be seeking to maximize the well-being of its residents, or should it be aiming for a satisfactory amount? Second, how should well-being be allocated across society, e.g., should those with the least amount of well-being receive the most resources, or should resources be put wherever they are expected to do the most good? Third, and finally, policy-makers need to balance a concern for the well-being of the present generation with that of future generations, where tempering the former might well be required to provide enough for the latter.

Conclusion: How do these definitions underlie the rest of the report?

This chapter has sought to analyze the way the term 'happiness' is understood in the context of GNH and of public policy more generally. It first noted that 'happiness' refers to something that is desirable for its own sake, and not, like money, good merely as a means to something else, and that the word is typically used to connote the conditions of a life that goes well. Then it drew a standard distinction between subjective and objective conceptions of well-being. GNH includes both elements, and so the reader will recurrently encounter explicit and implicit reference to both facets in the rest of this report. Next, this chapter noted that well-being can be plausibly understood not only as a sum of desirable elements, but also as a life that exhibits a certain pattern over time, a 'life-story', after which it pointed out that many theorists consider groups, and not merely individuals, also to be capable of being better and worse off. Finally, the chapter discussed ways to measure well-being, taking into account previous distinctions of subjective and objective, aggregative and distributive, individual and group. With these basic elements, the reader may confidently proceed to think about what it would mean to orient public policy toward the promotion of happiness.

References

Baumeister, R. F. and Vohs, K.D., 2002. The Pursuit of meaningfulness in life. In: S. J. Lopez and C. R. Snyder, eds. *Handbook of positive psychology*. New York: Oxford University Press. 608-618.

Baumeister, R., 1991. *Meanings of life.* New York: The Guilford Press.

Blanchflower, D.G. and Oswald, A. 2004. Well-being over time in britain and the USA. *Journal of Public Economics,* 88, 1359-1386.

Boniwell, I. and Henry, J. 2007. Developing conceptions of well-being. *Social Psychology Review,* 9, 3-18.

Brand, S., Beck, J., Hatzinger, M., Harbaugh, A., Ruch, H. and Holsboer-Trachsler, E., 2010. Associations between satisfaction with life, burnout-related emotional and physical exhaustion, and sleep complaints. *World Journal of Biological Psychiatry,* 11, 744-754.

Carroll, N., Frijter, P. and Shields, M.A., 2009. Quantifying the costs of drought: new evidence from life satisfaction data. *Journal of Population Economics,* 22, 445-461.

Chen, C., Lee, S-Y. and Stevenson, H. W., 1995. Response style and cross-cultural comparisons of rating scales among east asian and north american students. *Psychological Science,* 6, 170-175.

Delle Fave, A., Massimini, F. and Bassi, M., 2011. Hedonism and eudaimonism in positive psychology. In A. Delle Fave, ed. *Psychological Selection and Optimal Experience Across Cultures.* New York: Springer. Vol.2, 3-18.

Diener, E., Suh, E. M., Lucas, R. E. and Smith, H. L., 1999. Subjective well-being: three decades of progress. *Psychological Bulletin,* 125, 276-302.

Easterlin, R. A., 1995. Will raising the incomes of All increase the happiness of all? *Journal of Economic Behavior and Organization,* 27, 35-47.

_____ 2003. Explaining happiness. *Proceedings of the National Academy of Science,* 100, 11176-11183.

Fredrickson, B. L. and Joiner, T., 2002. Positive emotions trigger upward spirals toward emotional well-being. *Psychological Science,* 13, 172-175.

Habermas, J., 1987. *The theory of communicative action*, *Volume Two: Life world and system*. Translated by T. McCarthy. Boston: Beacon Press.

Heine, S. J., Lehman, D. R., Peng, K. and Greenholtz, J., 2002. What's wrong with cross-cultural comparisons of subjective likert scales. *Journal of Personality and Social Psychology,* 82, 903-918.

Huta, V. and Ryan, R. M., 2010. Pursuing pleasure or virtue: the differential and overlapping well-being benefits of hedonic and eudaimonic motives. *Journal of Happiness Studies,* 11, 735-762.

Ji, L., Nisbett, R. E. and Su, Y., 2001. Culture, change, and prediction. *Psychological Science,* 12, 450-456.

Kashdan, T. B., Biswas-Diener, R. and King, L. A., 2008. Reconsidering happiness: the costs of distinguishing between hedonics and eudaimonia. *The Journal of Positive Psychology,* 3, 219-233.

Khaneman, D., 2011. *Thinking, fast and slow*. New York: Farrar, Straus and Giroux.

Kitayama, S., Mesquita, B. and Karasawa, M., 2006. Cultural affordance and emotional experience: socially engaging and disengaging emotions in Japan and the United States. *Journal of Personality and Social Psychology,* 91, 890-903.

Kwan, V. S. Y., Bond, M. H. and Singelis, T. M., 1997. Pancultural explanations for life satisfaction. *Journal of Personality and Social Psychology,* 73, 1038-1051.

Larsen, R. J., Diener, E. and Emmons, R. A., 1986. Affect intensity and reactions to daily life events. *Journal of Personality and Social Psychology,* 51, 803-814.

Lemkin, R., 1944. *Axis rule in occupied Europe.* Washington, D.C.: Carnegie Endowment for International Peace.

Linley, P. A., Maltby, J., Wood, A. M., Osbourne, G. and Hurling, R., 2009. Measuring happiness. *Personality and Individual Differences,* 47, 878-884.

Luechinger, S. and Raschky, P. A., 2009. Valuing flood disasters using the life satisfaction approach. *Journal of Public Economics,* 93, 620-633.

Luechinger, S., 2009. Valuing air quality using the life satisfaction approach. *The Economic Journal,* 119, 482-515.

Markus, H. R. and Kitayama, S., 1991. Culture and the self. *Psychological Review* 98, 224-253.

Metz, T., 2013a. Meaning in life as the aim of psychotherapy. In: J. Hicks and C. Routledge, eds. *The experience of meaning in life.* Dordrecht: Springer. (ch. 30).

_____ 2013b. *Meaning in life: an analytic study.* Oxford: Oxford University Press.

Nussbaum, M., 2011. *Creating capabilities: the human development approach*. Cambridge, MA: Harvard University Press.

Oishi, S. and Diener, E., 2001. Goals, culture, and subjective well-being. *Personality and social psychology bulletin,* 27, 1674-1682.

Osin, E. and Boniwell, I., 2012. Towards a comprehensive model of eudaimonia: development of the integrated well-being scale. Presentation at the *6th European Conference on Positive Psychology* held in Moscow, 27 June.

Ostir, G. V., Markides, K. S., Black, S. A. and Goodwin, J. S., 2000. Emotional well-being predicts subsequent functional independence and survival. *Journal of the American Geriatrics Society,* 48, 473-478.

Ryan, R. M. and Deci, E. L., 2001. On Happiness and human potentials: a review of research on hedonic and eudaimonic well-being. *Annual Review of Psychology,* 52, 141-166.

Seligman, M. and Adler, A., 2013. Flourishing as a goal for the new development paradigm. In: The Centre for Bhutan Studies, ed. *Background papers by distinguished authors on public policy recommendations for happiness-based development paradigm.* Thimphu: The Centre for Bhutan Studies. (17-23).

Seligman, M., Ernst, R. M., Gillham, J., Reivich, K. and Linkins, M., 2009. Positive education. *Oxford Review of Education,* 35, 293-311.

Seligman, M., Steen, T. A., Park, N. and Peterson, C., 2005. Positive psychology progress. *American Psychologist,* 60, 410-421.

Sen, A., 1999. *Development as freedom*. New York: Knopf.

Senior, J., 2010. All Joy and No Fun: Why parents hate parenting. *New York Magazine.* Available at http://www.nymag.com/print/?/news/features/67024/.

Stone, A. and Shiffman, S., 1994. Ecological momentary assessment (EMA) in Behavioral Medicine. *Annals of Behavioral Medicine,* 16, 199-202.

Stone, A., Neale, J. M., Cox, D. S., Napoli, A., Valdimarsdottir, V. and Kennedy-Moore, E., 1994. Daily events are associated with a secretory immune response to an oral antigen in men. *Health Psychology,* 13, 440-446.

Suh, E. M., Diener, E., Oishi, S. and Triandis, H. C., 1998. The shifting basis of life satisfaction judgments across cultures. *Journal of Personality and Social Psychology,* 74, 482-493.

Uchida, Y., 2013. Collective well-being and a proposal for a sustainable society. In: The Centre for Bhutan Studies, ed. *Background papers by distinguished authors on public policy recommendations for happiness-based development paradigm.* Thimphu: The Centre for Bhutan Studies. (1-15).

Uchida, Y., Norasakkunkit, V. and Kitayama, S., 2004. Cultural constructions of happiness: theory and evidence. *Journal of Happiness Studies,* 5, 223-239.

Ura, K., Alkire, S., Zangmo, T. and Wangdi, K., 2012. *An extensive analysis of the GNH index*. Thimphu: The Centre for Bhutan Studies.

Veenhoven R., 1991. Is happiness relative? *Social Indicators Research,* 24, 1-34.

_____ 1994. Is happiness a trait? Tests of the theory that a better society does not make people any happier. *Social Indicators Research,* 32, 101-160.

_____ 2007. Measures of Gross National Happiness. In: OECD, ed. *Measuring and Fostering the Progress of Societies.* Paris: OECD Publishing. (232-253).

Williams, S. and Shaw, W. T., 1999. Mood and organizational citizenship behavior. *Journal of Psychology,* 133, 656-668.

Xing, Z., 2013. Some explorations on well-being from Chinese background. In: The Centre for Bhutan Studies, ed. *Background papers by distinguished authors on public policy recommendations for happiness-based development paradigm.* Thimphu: The Centre for Bhutan Studies. (103-111).

Chapter 3: Desirability of Sustainable Happiness as a Guide for Public Policy

—Neil Thin, Daniel Haybron, Robert Biswas-Diener, Aaron Ahuvia and Jean Timsit

Introduction

Suppose a society is wealthy and treats its members justly. Can we be sure this is a good society? Not necessarily. Among other things, these virtues do not guarantee the happiness of its citizens. Nor that the society is just in its dealings with those outside its borders, or those not yet born. Its people may, for instance, be lonely. They might pass their lives surrounded by ugliness, largely disconnected from either natural or even human-made beauty. Their work might be tedious, unrewarding, and stressful. They might be too rushed to enjoy life, or to share very much of it with each other. Perhaps they are too preoccupied with their own pursuits to enjoy the fulfillments of serving others. And they might secure their lavish unhappiness at great cost to their descendants, to their neighbours elsewhere on the globe, and to the rest of life on earth. To be treated justly, and to have some measure of material wealth, are both important. But they do not suffice to make a good society.

Past economic growth has helped to bring great progress in the global reduction of illness and poverty, in the extension of human lives, and in the reduction of some important forms of inequality (Kenny, 2011). But the dominant model for pursuing happiness today is at best inefficient and unsustainable, favouring resource-intensive lifestyles that are unlikely ever to be available to all of humanity. To continue on the current path not only condemns much of humanity to deprivation in the present; it risks catastrophic environmental harms that will undermine future happiness in all nations. We cannot defer forever the encounter with environmental limits. We need to find more efficient, less costly ways of pursuing happiness.

This chapter briefly makes the case for sustainable happiness as a major goal of policy. Because the very idea of happiness policy remains controversial, we will focus on the basic justification for making sustainable happiness an important policy objective. But we will also discuss how the argument applies to the Gross National Happiness (GNH) approach proposed for the new development paradigm (NDP) in this report. While the origins of this approach lie in Bhutan, GNH policy is compatible with a wide range of ethical, religious, and political value systems, including the values of liberty prized in modern liberal democracies.

Definitions

We begin by explaining our key terms, sustainability and happiness. Regarding sustainability, a classic statement by the Brundtland Commission for the United Nations proffers that 'sustainable development is development that meets the needs of the present without compromising the ability of future generations to meet their own needs.' (The World Commission on Environment and Development, 1987). What exactly this means in practice, whether this is the best way to define sustainability, or whether the notion of sustainability is the most useful way to think about our long-term responsibilities, remain disputed questions (Jamieson, 1998; Lutz Newton and Freyfogle, 2005; Bell and Morse, 2008; Vucetich and Nelson, 2010; Neumayer, 2012). However, we do not need to settle those debates here. However one defines sustainability, the current approach to development is unsustainable, in a way that should concern everyone. Without a change of course, no realistic amount of technological innovation will prevent a serious degradation in the quality of life on earth.

What is meant by 'happiness'? This section will briefly examine some definitions of happiness, but we note that the concept of happiness can be useful even if we do not all agree on an exact definition. For even when "happiness" is used as as a fairly open-ended term, we can use it to carry on an important kind of conversation or discourse. Towards the end of this chapter, we address this 'happiness lens' approach, and identify some ways in which conversations change and attention is steered when happiness is introduced as a theme.

Regarding definitions of happiness, we can distinguish two types: philosophical and operational. A *philosophical* definition specifies the essence or nature of happiness: what happiness is, such that certain things contribute to it or can be seen as indicators of it. An *operational* definition specifies what, in practice, we focus our attentions on. What do use as our gauge of happiness? People from widely varying philosophical perspectives might still agree on an operational definition of happiness, for instance because they agree that things like health are crucial indicators of happiness, even if they disagree about why health ultimately matters.

From an operational standpoint, this report defines happiness in terms of the nine domains of GNH policy outlined in Chapter One:

1. Psychological wellbeing
2. Population health
3. Educational attainment
4. Living standards
5. Good governance

6. Community vitality, connectedness and service
7. Time use and balance
8. Ecological resilience and diversity
9. Cultural resilience and diversity

This operational definition has three noteworthy features. First, it does not treat happiness simply as a state of mind, the way many researchers do (Haybron, 2011). Rather, it employs 'happiness' very broadly, as a general term for benefit—what is often called well-being or flourishing (Crisp, 2005). As understood in this report, happiness thus encompasses whatever benefits people (or other creatures that can be benefited or harmed).[1] This broader usage of the term has a long history and remains common among philosophers and historians, though much less so in the social sciences (e.g., Annas, 1993; White, 2006; McMahon, 2005).

Second, the list fundamentally concerns *societal*, not individual, happiness: it attempts to specify the key elements of a happy, thriving society. We will return to this point shortly.

Third, this list is compatible with a wide range of *philosophical* definitions of happiness. It does not try to tell us the essence of happiness, but simply to lay out what, in practice, should be the target of happiness policy. Philosophical definitions of happiness include (Crisp, 2005):

- **Mental state[2] theories**: happiness as a positive state of mind, such as pleasure and positive emotions, along with the absence of suffering.
- **Desire theories**: happiness as getting what you want.
- **Objective list theories**: happiness as getting things that are objectively good for us, like friendship, knowledge, accomplishment. For example, Aristotle's view of *eudaimonia*.

---

[1] We note that this report is concerned with the well-being of all living things, not just human happiness. There are important philosophical questions about the moral status of sentient nonhuman animals, nonsentient organisms, and holistic entities like species and ecosystems. We set such questions aside here, save to note that there are respectable, if controversial, philosophical arguments for according basic moral consideration to all of these entities (Brennan and Lo 2008). Moreover, there is a broad philosophical consensus that, if nothing else, all sentient creatures—those organisms capable of suffering—have moral standing. For simplicity, we focus on the human case in this chapter.

[2] Mental state theories are sometimes called 'hedonistic' theories. However, to avoid confusion with the more common use of the term 'hedonistic' to mean 'valuing immediate sensual gratification,' we will instead use the term 'mental state'.

The operational approach to happiness taken in this report is compatible with all three of these philosophical views. In fact, the Buddhist tradition is standardly understood as employing a mental state conception of happiness, seen primarily as freedom from suffering (Ricard, 2006; Goodman, 2010). Yet Bhutan, which is largely a Buddhist society, promotes happiness by focusing on the nine dimensions of GNH.

To illustrate further, consider a society with low GNH, in which people are time-poor, unhealthy, have a degraded environment, are alienated from their own cultural traditions, lack adequate education or decent governance, and so on. Readers whose view of happiness centers on positive experiences may note that such a society would not be a pleasant place to live. Readers whose view of happiness centers on preference satisfaction may note that in a low GNH society, people are not likely to be having the sorts of lives they truly want. And readers who see happiness as an objectively flourishing human life may note that a low GNH society is unlikely to do well by any eudaimonic standards. In general, the nine domains of GNH probably contribute to happiness as most people, in most parts of the world, would see it.

We trust, then, that the present approach to GNH can be accepted by people holding a wide range of different philosophical views about happiness (Haybron and Tiberius, 2013). Operationally, everyone might agree that happiness policies must target not just mental states but also matters like health, education, community vitality and environmental quality. Because some of these items cannot be fully understood or even defined at the individual level, it makes sense to focus, not just on measures of individual happiness, but more holistically on indicators of a flourishing society. Whether one thinks of happiness as ultimately a property of individuals or of collectives, the fact remains that human functioning is highly interdependent, involving complex feedbacks between individuals and the social and physical environment. Many essential processes for happiness occur only at the collective or system-wide level. Individualists in the liberal political tradition can agree with these points just as surely as communitarians who see happiness as something that cannot be defined entirely at the individual level.

In short, the goal of the NDP is sustainable happiness: a world in which human beings and the rest of life can sustainably flourish. As the core indicators of happiness, this report proposes the nine domains of GNH. These domains are meant to provide a holistic assessment of how well nations are doing: to what extent they are happy, thriving societies.

Why happiness policy?

The basic rationale

We suspect most readers will already agree that policy should in some sense be sustainable, not undermining the world's prospects for a decent future. But why *happiness* policy? In fact this idea too should be uncontroversial: policymakers can either take account of the impacts of their policies on happiness, or ignore them. We take it to be obvious that policymakers should consider whether their decisions make people better or worse off. To disregard such information is, indeed, irresponsible. Yet taking account of such information, if only for the purpose of avoiding policies that make people worse off, is all that happiness policy requires. Happiness policy is, in principle, a perfectly respectable and legitimate, indeed morally necessary, enterprise.

The neglect of happiness in economics and philosophy

Why, then, has happiness not played a more visible role in policy over recent decades? Part of the answer lies in the way philosophers and economists have tended to think about policy. At some level, economic approaches to policy have always been concerned with happiness, since economists have typically adopted *welfarist* approaches to policy: ultimately, the goal of policy is to promote welfare or happiness (Hausman, 2012). Early economists generally saw happiness as a mental state. But this view fell out of favor primarily because of positivist and behaviorist doubts about the possibility of measuring any mental states. So, for most of the last century, economists have typically understood happiness as preference satisfaction, i.e. getting what one wants. Preferences, in turn, were seen as being revealed by behavior. Putting this together: peoples' behavior reveals what they want, and getting what one wants defines happiness, so any freely made choice gets people what they want and thus maximizes happiness. Therefore, there is no need to measure, or even talk about, mental states. The view that mental states could not be scientifically measured and hence had no place in scientific theories was once popular in all social sciences, including psychology. But this behaviorist view was gradually abandoned as more rigorous ways to measure mental states were developed. Even in economics, mental states like consumer confidence are routinely included in theories. Economics as a discipline is currently in the process of reincorporating happiness as a mental state into its models, but the tradition of defining happiness as preference satisfaction also remains strong (Adler, 2011; Dolan and White, 2007; Frey, 2008; Kahneman, 2011; Layard, 2006).

Two features of mainstream economics are particularly important for motivating the focus on economic growth (Hausman, 2012). First, people are frequently assumed to be fully informed and rational in their choices. Second, a standard assumption is that people's preferences are fully revealed by their

choices. In fact there's no saying what people prefer apart from what they have been observed to choose. (These are taken as convenient idealizations, not necessarily literal truths. Economists generally recognize that people aren't always rational or fully informed.)

Given these assumptions, it would seem that to make people better off we must give them more options. With such a view, economic growth seems like the golden road to improving human life, absolving policymakers of the responsibility to check whether their decisions actually make people happier: give people more freedom to live as they wish, and happiness will take care of itself. From this perspective, happiness policy might seem unnecessary and even harmful.

This approach to economics is not the only reason for the dominance of indicators like GDP in policy. Quite apart from economic theory, one can readily imagine a variety of reasons policymakers and voters might find it appealing to raise incomes. Human beings need little inducement to focus their attentions on money. But traditional economic theory offers the growth-centered paradigm a powerful intellectual backing.

Political philosophers, for their part, have tended to relegate happiness policy to the margins, at least outside of utilitarian circles and their relatives. A major reason for this has been the emphasis of this literature on questions of distributive justice. Many argue, for example, that justice requires limiting inequalities of resources or capabilities, since these bear on the opportunities people have to lead good lives (Rawls, 1971; Sen, 2009; Nussbaum, 2011; Lamont and Favor, 2013). But philosophers generally reject the idea that justice demands equality of happiness or well-being, arguing that it is no injustice if some fail to lead happy lives because, despite their opportunities, they have chosen badly. Be that as it may, distributive justice is only one policy consideration, and these views tend to leave open that happiness might still be a quite major policy concern. In fact they are often taken to concern only decisions about the basic structure of society, or constitutional essentials, rather than everyday policy deliberation.

Even utilitarians need not support happiness policy, since they routinely state that the best way to promote happiness is sometimes *not* to try explicitly to promote happiness (Mill, 1979; Sinnott-Armstrong, 2011). It will be a happier society, for instance, if judges follow the law instead of deciding cases based on their view of what would maximize the sum of happiness. Still, it would take some implausibly strong assumptions to maintain that we will best promote happiness by *never* taking account of it, as we explain below.

Why policy needs to focus explicitly on happiness

There are two basic reasons why policymakers need to attend directly to happiness, and not just resources, capabilities or other freedoms alone, if they are to take full account of the extent to which their policies make people better or worse off. First, people are not always rational or fully informed (Haybron, 2008). They make mistakes, often predictable mistakes, and these will diminish the benefits of their options, sometimes in ways that policymakers cannot responsibly ignore. Most Americans today enjoy unprecedented freedom to eat varied, healthy diets, for instance, and many have responded to this good fortune by eating their way to an early grave. An oft-noted possibility is that U.S. agricultural policies, by subsidizing unhealthy foods, have contributed to the present epidemics of obesity and diabetes. It is hardly courting controversy to suggest that, should policymakers discover that their actions will have the effect of crippling or killing off a sizable proportion of the population, they ought to take that information on board.

Second, many of the things that make our lives go better are not things we can meaningfully choose as individuals. Healthy communities, for instance, are an important source of happiness, and governments should at least try to avoid policies that weaken communities. An exclusive focus on individual choice will sometimes blind policymakers to important goods, like a supportive community.

Similarly, collective action problems can undermine the individual pursuit of happiness: individually rational choices do not always add up to a collectively rational whole. Many environmental problems are like this, most acutely in the well-known 'tragedy of the commons' (Hardin, 1968). The atmosphere, for example, is essentially a global commons, and each person can only make a miniscule difference in greenhouse gas levels. Collective action is needed to solve this sort of problem, and wise policies to deal with it cannot simply be focused on maximizing long-term economic growth. They need to consider, among other things, what course of action will best serve long-term human happiness.

A prominent example from the happiness literature concerns positional goods: benefits that depend on a person's relative position in society, like social status (Ahuvia, 2008). Such goods are zero-sum: one person gains only if another loses. As a result, the pursuit of positional goods expends resources but does not promote happiness on a society-wide basis. So while it is easy to understand why individuals pursue positional goods, this competition can leave us worse off collectively (Layard, 2005).

It is important to recognize that governments and organizations *can't help* but make decisions that affect people's happiness. Sometimes, governments will have a reasonable idea about these effects. Must they entirely ignore this information, setting aside whether their choices will benefit people or harm them? Of course not. Yet taking account of such information is all that happiness policy requires.

While our discussion focuses on the basic case for sustainable happiness policy, we suggest that sustainable happiness should be, not just a policy consideration, but a central goal of policy, as it is in the NDP. Justice is essential, but it less a *goal* for policy than a minimal requirement of civilized behavior. We should not deprive people of their due. But when thinking about our positive aspirations, the need to be just is not by itself a very inspiring mandate. In trying to secure a not merely just but *good* society, our deliberations should arguably center on what would make life better. Will our efforts benefit those concerned? Will they contribute to the quality of life? Traditional economic indicators should continue to play a large role in policy, but the economy is properly the servant of happiness, not an end in itself. This is not a radical thought: in fact it is a fundamental tenet of mainstream economics. The NDP differs mainly in calling for a more explicit focus on the various dimensions of happiness, and emphasizing that the present good not be pursued at the expense of the future.

The compatibility of happiness and sustainability

An important challenge for the NDP is to address the perceived tensions between happiness and sustainability. These tensions relate to trade-offs between individuals and society, short-term and longer-term goods, present and future generations, and human and nonhuman welfare. On the one hand, the value of sustainability is entirely dependent on there being something worth sustaining. By contrast, happiness is not only a goal, but an ultimate value. In this sense, happiness is primary. On the other hand, the long-term risks posed by our present lifestyle and policies are grave, raising questions of bare survival for many. So it is understandable if some doubt that we need to worry very much, in this context, about the fine points of happiness. You don't need a battery of measures to know that hunger is no friend of happiness.

Yet it would be a serious mistake to think that sustainability policies must come first, only after which can we begin to think about happiness. Rather, sustainability policy must also be happiness policy. One reason was noted above: we cannot intelligibly speak of sustainability unless we have some notion of what needs to be sustained. And it would be irresponsible to limit ourselves to maintaining nothing more than bare survival. We can, and should, aim higher, sustaining not just the conditions of life, but good lives. Another reason is pragmatic: austerity measures are unappealing, and sustainability

efforts will be less effective if they are not plausibly linked with both short-term and longer-term happiness.

But how realistic is it to expect positive connections between sustainability and short-term happiness? People can, after all, benefit from unsustainable behaviours and policies (Adams, 2004). This is actually an upshot of the GNH framework's composition. Even if we build ecological resilience into the definition of happiness, the fact remains that this will only be one dimension of happiness among others. This leaves open the possibility that gains in other aspects of happiness will outweigh the losses in this dimension. In fact this is a positive feature of the framework: while people often underestimate the compatibility of happiness and sustainability, we may want to acknowledge that among the challenges facing the NDP is precisely that people sometimes benefit from ecological destruction.

That said, it is easy to overstate the tensions between short-term personal happiness and sustainability. For one thing, the most important sources of SWB, and arguably happiness as well, do not require high levels of material consumption. These include meaningful, skilled activities; a positive, healthy outlook including concern for others; a sense of security; some degree of autonomy or control in one's life; and most of all, good relationships and rewarding social interactions: family, friends, and community (Diener and Biswas-Diener, 2008; Haybron, 2013). Material affluence can help with all these things, but is not necessary (Ahuvia, 2012), and there is no reason to think that a sustainable economy cannot make them available to all people. Supportive communities and socializing with friends and family, for instance, can pay great happiness dividends without taxing the environment. In short, human happiness does not require a resource-intensive lifestyle.

As well, a more responsible and humane way of life can promote happiness for ourselves as well as others. Self-transcendence, altruism, or more plainly concern for others, has repeatedly been shown to strengthen subjective well-being (Lyubomirsky, 2007). Being conscious of our responsibilities towards future generations is one form this can take. Similarly, ecological responsibility is another form of self-transcendence that can sometimes involve foregoing short-term pleasures even as it contributes, overall, to the individual's own happiness (Nisbet, Zelenski and Murphy, 2011; Corral-Verdugo, 2012).

Because sustainability and happiness both involve so many factors and can take so many forms, it is hard to offer robust generalizations about their relationship. To see how the two imperatives could be not only compatible but mutually supporting, it will be helpful to consider a thought experiment regarding urban planning. We do not offer the example as a policy proposal, nor do we present

47

evidence that implementing such a policy would in fact promote sustainable happiness. (For policy recommendations, see Chapter 10, 'Community Vitality.') The point is simply to help the reader visualize how sustainability and short-term happiness might go hand in hand. Imagine, then, a municipality that decides to shift residential development from low-density suburban sprawl to a higher-density model—call it 'walkable communities.' These communities have the following features:

- Shopping and other businesses in walking distance
- Central plaza and other public gathering spaces
- Front porches
- Sidewalks
- Trees
- Parks and other green space
- Bike lanes
- Good schools
- Major employers nearby
- Good public transportation
- Low traffic

These features, let us suppose, contribute to sustainability by reducing the demands for transportation, and the higher density housing requires less infrastructure. They also contribute to community by bringing people closer to a higher number of neighbours, making it more appealing to get out and meet and interact with them. This in turn may induce residents to consume fewer resources, for a variety of reasons: if socializing is easier and more appealing, people may find shopping to be a less attractive leisure activity; they might need fewer consumer products to entertain them; electricity and fuel consumption may decline somewhat; people may share many products rather than buy duplicates of what their neighbours own; if trust in neighbours is high, then children may have more opportunities for unsupervised play that does not require expensive equipment, driving etc. Additionally, this sort of community will likely be more resilient in the face of economic shocks, as people are better positioned to help each other in times of scarcity. Similarly, because residents drive less, they will be less vulnerable to fluctuations in the price of oil. Besides the benefits of community and economic resilience, happiness might also be promoted by greater interaction with nature and higher levels of exercise. Were we to add to this list of features a shorter work week and more vacation time, the benefits would likely be multiplied, as people have greater leisure to take the time to interact with each other, again building both community and happiness, and perhaps contributing further to sustainability.

Finally, this sustainable happiness initiative might generate powerful 'felicitation feedbacks' that lead to further gains in both sustainability and happiness. Given the malleability of preferences, it is quite possible that such a living arrangement would change residents'—and other citizens', whose awareness of this community expands their own sense of possibility—preferences in a beneficial way, increasing demand for the kinds of features that this community embodies, and reducing demand for the less sustainable, low-density suburban developments that promote a more sedentary, more socially isolated existence in which an abundance of consumer products might be used to substitute for a lack of other opportunities for gratifying leisure time. Moreover, denser social networks, particularly with neighbours, might tend to discourage antisocial attitudes and behaviour, and hasten the spread of prosocial attitudes and behaviours. We should not be surprised if the residents of this community become supporters of further sustainable happiness policies. Perhaps, eventually, residents would *want* to make substantial reductions in resource usage, seeing a sustainable lifestyle not as a necessary evil, but an essential part of their happiness.

How the happiness lens changes policy

Defining values and objectives, and identifying indicators by which to assess them, are essential aspects of planning the good society. But in policy and practice, desired goods or outcomes can easily be confused with the indicators selected to represent them. Thus poverty reduction may be confused with the numbers or percentages of populations above a monetary 'poverty line', health confused with mortality rates, education confused with percentages attending or completing school, subjective well-being confused with self-reported life satisfaction, and so on. Though the measures are often very useful and practical, such mental shortcuts are regrettable because a great deal of what is good in life is hard to define and even harder to measure. This is especially true of something as broad and elusive as 'happiness'. We argue here, therefore, that more significant changes are heralded by the concept of a 'happiness lens' than just the substitution of one set of indicators for another (Thin, 2012). This approach emphasizes the process of becoming more ethically transparent (to ourselves and others) by focusing more explicit attention on values.

While the NDP can usefully include indicators of subjective well-being along with other indicators, the point is not to shift from one kind of indicator-focused reductionism to another. The point is, more broadly, to shift the terms of debate, making considerations of happiness or well-being an explicit object of public and policy deliberation. The use of this lens encourages all of us to consider whether and how the outcomes of our policies and actions will benefit present and future generations over the whole of the life course, and whether the

interactions among various activities and domains are mutually supportive or antagonistic.

For many years already, critical questions have been asked about whether economic growth is sustainable, environmentally benign, equitable, pro-poor, or otherwise socially benign. The happiness lens reminds us to ask still more searching questions about the value and sustainability of any progress indicators. Economic growth will continue to play a role, especially in contexts where growth is crucial to ending poverty. But its role must become less dominant, allowing policymakers and the public to take seriously the other ways in which happiness might be advanced. It should be broadly acceptable, and not a highly risky political move, for politicians to publicly proclaim that some of their policies will not promote economic growth, or might even reduce it compared to other alternatives. While many policies already have this feature, it is not often made explicit, and politicians frequently go to some lengths to deny it. Simply getting people to think explicitly about whether policies will serve happiness over the long haul, leading to a better quality of life and not just a higher living standard, is a crucial part of the effort.

Let's consider more concretely the happiness lens, which includes five important attitudes or perspectives (Thin, 2012):

a. **Positivity**: recognizing and learning from the sources of happiness, and promoting good life outcomes, rather than merely adequate or remedial outcomes; making our appraisals more realistic by avoiding the bias of pathologism.
b. **Empathy**: institutionalizing an interest in first-person perspectives, e.g. subjective experiences and self-evaluations, with a view to understanding and respecting people's values and views on their own conditions and well-being.
c. **Holism**: recognizing that policies and practices focused on one area of life, such as health or education, interact with the whole of people's lives, and therefore require a more holistic analysis.
d. **Lifespan perspective**: exploring how well-being differs among different cohorts and different points in the life cycle; respecting the importance of life narratives and the shape of a life.
e. **Transparency**: being more explicit about how our goals and actions lead towards happiness and other ultimate values.
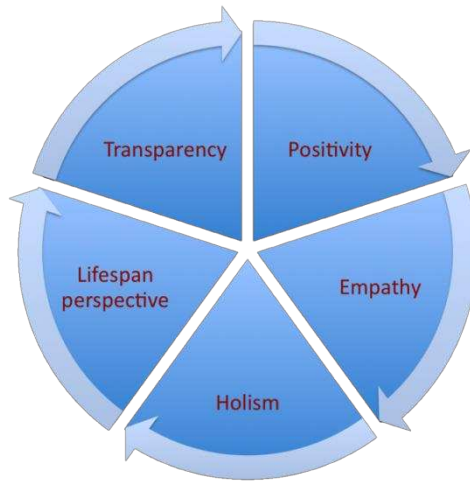
Figure 2. *The happiness lens*

Where in the policy process will the happiness lens make a difference?

As well as considering these five categories of differences that the happiness lens can make, it is also important to identify where in the policy process these attentional shifts might operate. We can use our strengthened understanding of happiness to improve the situational analysis on which we base our plans; in setting goals and developing and implementing plans for activities and processes that will get us there; in thinking through and expressing the ethical justification for those plans; and in choosing the indicators and means of assessing our contributions to happiness. Whether we are operating at global levels or simply trying to run a household, our efforts to make improvements in people's lives involve *learning, planning, justifying, doing,* and *evaluating.* Looking separately at these five aspects of the policy process is a good way of assessing whether our current approaches pay adequate heed to happiness.

	Happiness considerations
Learning	Do we understand the key sources of happiness and unhappiness in the contexts in which we are working? Do our plans consider evidence of how people are faring in various domains? Do we have a good understanding of people's priorities?
Planning	When setting objectives, is it clear how our interventions will facilitate happiness?
Justifying	Have development plans been justified to those concerned in terms of happiness dividends to current and future generations?

Doing	Are development activities organized so that, where possible, the processes are intrinsically beneficial rather than just means to some later ends?
Evaluating	In assessing policies, do indicators of progress include evidence concerning the happiness of key stakeholders? Do the means of assessment give people a meaningful chance to reflect on the different values of various aspects of development?

Table 2: *Happiness considerations in different policy processes*

Note that different aspects of the policy process may require different kinds of information, and different degrees of reliability in the measures used. At the evaluation stage, for example, policymakers might need highly reliable measures, because they require data on how specific groups of people are doing, and may only have one chance to get it right. One misleading result could result in a bad decision. At the planning stage, by contrast, we might only need general information about the causes and correlates of happiness. For this purpose, it may not matter so much if any single study is subject to significant error, because policymakers can look at the entire scientific literature on the subject. For example, when many studies using a variety of instruments converge on the conclusion that unemployment has remarkably strong effects on happiness, policymakers can be far more confident in the numbers than if they are simply looking at a single survey of their citizens. That single survey may still be quite reliable, but concerns about reliability will have less force in contexts where we don't need to put much weight on any one study, and only need general information about the sources of happiness.

Conclusion

We have not tried to defend a particular approach to sustainable happiness policy in this chapter. Rather, we have argued more modestly that such policy is both legitimate and necessary. We have also indicated some of the limitations and benefits of such an approach, and tried to clarify some of the issues that policymakers will need to confront in creating and implementing the new development paradigm. Sustainable happiness is not a radical or sectarian policy goal, but something that, in its basics, we should all be able to agree on. We hope that someday people will look back at the contemporary debate over whether to adopt such policies at all, and wonder what all the fuss was about—but be glad that we undertook it.

Appendix: Objections and replies

Is happiness policy paternalistic?

Some doubt that governments should measure and promote happiness. It is commonly objected that happiness ought to remain a private matter. The thought here is that people should be free to pursue their own good however they wish, and the state has no business getting mixed up in that endeavour, save to secure the freedoms people need to do so. Objectors raise concerns about state-sponsored 'Happiness Police' as if the mere acts of assessing trends in happiness and considering their policy implications were tantamount to a form of bullying.[3]

But for most happiness policies that have been proposed, including for the NDP, the claim is a red herring. State efforts to promote well-being need not usurp the individual's responsibility for her own welfare any more than promoting economic growth infringes on individuals' responsibilities to earn their own living. Even if it isn't the state's job to pay everyone's bills, or to ensure their happiness, it certainly is the state's job to pay some mind to what it does to its constituents' economic prospects, and how its decisions affect their welfare. This is not paternalism, but a minimal requirement of responsible governance.

Indeed, one important motivation for adopting a happiness lens in policy and governance is to *avoid* paternalism, by paying due respect to people's own values and subjective experiences (Haybron and Alexandrova, 2013). GNH, for example, tracks values that most people are known to care deeply about, and which are not always adequately addressed by traditional economic measures. If policymakers are to make policy responsive to citizens' concerns and aspirations for their lives, they need to take such information on board.

Of course, some happiness policies can, like most kinds of policy, be paternalistic. But even paternalistic policies may not always be objectionable, and most people support some kinds of paternalism, like food and drug safety regulations. We will not discuss the limits of acceptable paternalism in this document, but simply note that happiness policy is not inherently paternalistic in the least. In fact, it should be part and parcel of any nonpaternalistic approach to policy.

---

[3] 'Don't ask us how happy we are Mr. Cameron... it'll only make us feel miserable,' by John Naish, *The Daily Mail*, November 16, 2010. Similarly, 'Be afraid. Here come the happiness police,' by Frank Furedi, *The Independent*, July 27, 2006.

Is sustainable happiness the sole aim of policy?

Many commentators, including classical utilitarians and their contemporary counterparts, argue that maximizing happiness—in this case understood roughly in terms of subjective well-being—is the sole legitimate end of policy, or any kind of decision making (Bentham, 1780/1969; Layard, 2005). While the NDP takes the promotion of GNH to be a central goal of policymaking, it is not committed to utilitarian doctrine, nor does it require a mental state conception of happiness or the adoption of GNH as the sole aim of policy. Governments might embrace GNH alongside other values, such as justice, rights and liberty, as well as capabilities.

In particular, the promotion of happiness must be constrained by principles of justice, a point already recognized by the commitment of GNH policy to equitable development. This is not a particularly controversial claim, and can be accepted by utilitarians and most others (Sinnott-Armstrong, 2011). Indeed it is arguably a point of consensus among moral philosophers.

Does happiness policy ignore the demands of poverty and suffering?

Although the happiness lens accentuates the positive more than some other approaches, it does not confine our attention to this any more than 'health care' should ignore the importance of curing illness. Positivity ensures that we learn from success and think about really good lives, but it doesn't prevent us from learning about harms and remedies. Any kind of happiness policy will be concerned with unhappiness, no less than happiness. Arguably, happiness policy should be more concerned with reducing unhappiness than promoting happiness, since it is widely believed that the badly-off should get higher priority than the well-off (Arneson, 2002). In short, unhappiness is at least as much a concern of happiness policy as happiness is.

A related worry is that governments might point to surveys showing positive reports of subjective well-being among their poor citizens and use this information to discount their urgent needs for assistance. That slum-dwellers in Kolkata report positive life satisfaction, for example, should not be used to conclude that they are fine and need no improvement in their living conditions (Biswas-Diener and Diener, 2001). The GNH framework used in this report substantially diminishes this problem by counting psychological well-being as only one among nine dimensions of happiness. Second, justice may demand addressing some problems of poverty, like discrimination against women, even when considerations of happiness do not. Third, it is possible for measures to overstate or understate *absolute* levels of happiness while still providing reliable information about *relative* levels of happiness (Haybron, 2008). Those worried about whether the poor are overstating their well-being might still accept the information that self-reports give about their relative welfare. This point is

important because, fourth, poor populations still tend to do *worse* than non-poor groups on subjective well-being measures even though they often report moderately high subjective well-being (Biswas-Diener, 2008; Helliwell, Layard and Sachs, 2012). Subjective well-being research makes clear that poverty tends to make life less pleasant and satisfying. Fifth, it also helpfully reminds us of human resilience, that poverty need not reduce us to mere victims living in abject misery. So subjective well-being measures, interpreted with appropriate care, do provide valuable information about the happiness impacts of poverty.

Does the NDP misuse the word 'happiness'?

No matter how people employ the word 'happiness', some will argue that they are misusing it. Many researchers, particularly in the social sciences, think it obvious that happiness is just a psychological matter. To expand the notion of happiness beyond subjective well-being, goes the objection, is to start talking about something other than happiness.[4]

But other researchers, particularly in philosophy and other humanities fields, think it obvious that 'happiness' is *not* just a psychological term, but rather a value term denoting a good or enviable life. Disagreements about happiness are not disputes about psychology, but arguments about ideals of living: what sort of life ultimately benefits a person? Those drawn to this understanding of happiness sometimes suggest that researchers who treat 'happiness' as a psychological term are misusing the language, confusing happiness with the emotion of feeling happy (Annas, 2004; Nussbaum, 2008).

More likely, both camps have a point: in contemporary English usage, 'happiness' has more than one meaning, and both uses of the term probably have some basis in ordinary language. Sometimes, as when talking about 'life, liberty and the pursuit of happiness,' or when speaking of happy *lives*, people do seem to have the broader value notion in mind. Others, as when talking about *being* happy, the term really does seem to be purely psychological. For example, American college students have been observed to judge that a person with high subjective well-being, but only because he never learned that his family and friends hated him behind his back, was nonetheless *happy*. Yet they also thought he did not lead a *happy life* (Haybron, 2008). Responses to the 'happy' question tracked his subjective well-being, while responses to the 'happy life' question tracked responses to questions like whether he had a

---

[4] We do not make this objection, but note that all the authors of this chapter use 'happiness' in the psychological sense in their other work. Recent philosophers who use 'happiness' in this manner include Sumner (1996), Haybron (2008 and 2011), and Feldman (2010). These three authors use other terms like 'well-being' for what this report calls 'happiness'. Again, the difference is merely verbal.

fortunate or enviable life, flourished, or had a high level of well-being. In short, these students' usage of 'happiness' conformed to the views of *both* camps of researchers, depending on how the questions were phrased. This suggests that 'GNH' does not misuse the term 'happiness'; it simply adopts one of the major uses in the language.

While GNH does not simply identify happiness with mental states, it still accepts that good lives must include SWB. Critics of SWB research complain that it overemphasizes the value of short-lived pleasure. Yet even those who employ 'happiness' as a psychological term don't confuse it with momentary feelings. Instead they view it as a typically lasting psychological condition that might be quite rich and complex (Haybron, 2008). Writing from a Buddhist perspective, Matthieu Ricard defines happiness as "a deep sense of flourishing that arises from an exceptionally healthy mind. This is not a mere pleasurable feeling, a fleeting emotion, or a mood, but an optimal state of being" (Ricard, 2006). Even if this state of mind is not the whole of human well-being, or happiness as understood in this report, it is clearly quite important.

References

Adams, W. M., 2004. Biodiversity conservation and the eradication of poverty. *Science,* 306(5699), 1146-1149.

Adler, M., 2011. *Well-being and fair distribution: beyond cost-benefit analysis*. New York: Oxford University Press.

Ahuvia, A. C., 2008. If money doesn't make us happy, why do we act as if it does? *Journal of Economic Psychology*, 29(4), 491.

_____ 2012. Wealth, consumption and happiness. In: A. Lewis, ed. *The Cambridge Handbook of Psychology and Economic Behaviour.* Cambridge, England: Cambridge University Press. 199–206.

Annas, J., 1993. *The morality of happiness*. New York: Oxford.

_____ 2004. Happiness as achievement. *Daedalus,* 133(2), 44-51.

Arneson, R., 2002. Egalitarianism. In *The Stanford Encyclopedia of Philosophy*, ed. E. N. Zalta. (URL = http://plato.stanford.edu/entries/egalitarianism).

Bell, S. and Morse, S., 2008. *Sustainability indicators: measuring the immeasurable?* New York: Routledge.

Bentham, J., 1780/1969. An introduction to the principles of morals and legislation. In: M. P. Mack, ed. *A Bentham Reader*. New York: Pegasus. 73-144.

Biswas-Diener, R. and Diener, E., 2001. Making the best of a bad situation: satisfaction in the slums of Calcutta. *Social Indicators Research,* 55(3), 329-352.

Biswas-Diener, R., 2008. Material wealth and subjective well-being. In: M. Eid and R. J. Larsen, eds. *The Science of Subjective Well-Being*. New York: Guilford Press, 307-323.

Bok, D., 2010. *The politics of happiness: what government can learn from the new research on well-being*, Princeton University Press.

Corral-Verdugo, V., 2012. The positive psychology of sustainability. *Environment, Development and Sustainability,* 14(5), 651-666.

Crisp, R., (2005). Well-being. In: E. N. Zalta, ed. *The Stanford encyclopedia of philosophy*. (URL = http://plato.stanford.edu/entries/well-being).

Diener, E. and Biswas-Diener, R., 2008. *Happiness: unlocking the mysteries of psychological wealth*. Malden, MA: Blackwell.

Dolan, P. and White, M. P., 2007. How can measures of subjective well-being be used to inform public policy? *Perspectives on Psychological Science,* 2(1), 71-85.

Feldman, F., 2010. *What is this thing called happiness?* New York: Oxford.

Frey, B. S., 2008. *Happiness: a revolution in economics*. Cambridge: MIT Press.

Goodman, C., 2010. Ethics in Indian and Tibetan buddhism. In: E. N. Zalta, ed. *The Stanford Encyclopedia of Philosophy*.

(URL = http://plato.stanford.edu/entries/ethics-indian-buddhism)

Hardin, G., 1968. The tragedy of the commons. *Science,* 162(3859), 1243-1248.

Hausman, D. M., 2012. Philosophy of economics. In: E. N. Zalta, ed. The Stanford encyclopedia of philosophy.

(URL = http://plato.stanford.edu/entries/economics)

Haybron, D. M., 2013. *Happiness: A Very Short Introduction.* New York: Ocford

Haybron, D. M. and Alexandrova, A., 2013. Paternalism in economics. In: C. Coons and M. Weber, eds. *Paternalism: theory and practice*. New York: Cambridge.

Haybron, D. M. and Tiberius, V., 2013. The What of wellbeing policy, unpublished ms. A longer version of this paper was published online as "Normative foundations for well-being policy," Papers on economics and evolution 2012-02, Max Planck Institute of Economics, Evolutionary Economics Group.

Haybron, D. M., 2008. *The pursuit of unhappiness: the elusive psychology of well-being*. New York: Oxford University Press.

_____ 2011. Happiness. In: E. N. Zalta, ed. *The Stanford encyclopedia of philosophy*.

(URL = http://plato.stanford.edu/entries/happiness)

Helliwell, J., Layard, R. and Sachs, J. eds., 2012. *World happiness report*. New York: The Earth Institute, Columbia University.

Inglehart, R., Roberto Foa, C. P. and Christian, W., 2008. Development, freedom, and rising happiness: a global perspective (1981-2007). *Perspectives on Psychological Science,* 3(4), 264-285

Jamieson, D., 1998. Sustainability and beyond. *Ecological Economics,* 24(2), 183-192.

Kahneman, D., 2011. *Thinking, fast and slow*. New York: Farrar, Straus and Giroux.

Kenny, C., 2011. *Getting better: why global development is succeeding and how we can improve the world.* New York: Basic Books.

Lamont, J. and Favor, C., 2013. Distributive justice. In: E. N. Zalta, ed. *The Stanford encyclopedia of philosophy*.

(URL = http://plato.stanford.edu/entries/justice-distributive)

Layard, R., 2005. *Happiness: lessons from a new science*. New York: Penguin.

_____ 2006. Happiness and public policy: A challenge to the profession. *The Economic Journal,* 116(510), C24-C33.

Lutz Newton, J. and Freyfogle, E. T., 2005. Sustainability: a dissent. *Conservation Biology,* 19(1), 23-32.

Lyubomirsky, S., 2007. *The how of happiness*. New York: Penguin.

McMahon, D. M., 2005. *Happiness: a history*. New York: Atlantic Monthly Press.

Mill, J. S., 1979. *Utilitarianism*. Indianapolis: Hackett.

Neumayer, E., 2012. Human development and sustainability. *Journal of Human Development and Capabilities,* 13(4), 561-579.

Nisbet, E. K., Zelenski, J. M. and Murphy, S. A., 2011. Happiness is in our nature: exploring nature relatedness as a contributor to subjective well-being. *Journal of Happiness Studies,* 12(2), 303-322.

Nussbaum, M. C., 2008. Who is the happy warrior? Philosophy poses questions to psychology. *The Journal of Legal Studies,* 37(s2), S81-S113.

_____ 2011. *Creating capabilities: the human development approach*: Belknap Press of Harvard University Press.

Rawls, J., 1971. *A theory of justice*. Cambridge, Mass.: Harvard University Press.

Ricard, M., 2006. *Happiness: a guide to developing life's most important skill*. New York: Little, Brown and Co.

Sen, A., 2009. *The idea of justice*. Cambridge, Mass.: Harvard University Press.

Sinnott-Armstrong, W., 2011. Consequentialism. In: E. N. Zalta, ed. *The Stanford encyclopedia of philosophy*.

(URL = http://plato.stanford.edu/entries/consequentialism).

Stiglitz, J. E., Sen, A. and Fitoussi, J. P., 2009. *Report by the Commission on the measurement of economic performance and social progress.* Paris: OECD (URL=http://www.stiglitz-sen-fitoussi.fr/documents/rapport_anglais.pdfs).

Sumner, L. W., 1996. *Welfare, happiness, and ethics*. New York: Oxford.

The World Commission on environment and development, 1987. *Our Common Future*. New York: Oxford University Press, 43.

Thin, N., 2012. *Social happiness: research into policy and practice.* Bristol: Policy Press

United Nations, 2011. *Resolution 65/309: Happiness: towards a holistic approach to development.* New York: United Nations (http://www.un.org.)

Veenhoven, R., 2006. Quality-of-life in the modern society measured with happy life years. In: Y. K. Ng and L. S. Ho, eds. *Happiness and public policy: theory, case studies and implications,* Basingstoke: Palgrave Macmillan, 19-44.

_____ 2010. How universal is happiness. In: E. Diener, D. Kahneman, and J. F. Helliwell. eds. *International differences in well-being.* Oxford, UK: Oxford University Press, 328-350.

Vucetich, J. A. and Nelson, M. P., 2010. Sustainability: virtuous or vulgar? *BioScience,* 60(7), 539-544.

White, N. P., 2006. *A Brief History of Happiness*. Oxford: Blackwell.

Chapter 4: Subjective Wellbeing Measures to Inform Public Policies

— Wenceslao Unanue

Summary

Modern nations employ standard social and economic indicators in order to allocate limited resources and to measure their societies' well-being. Despite the fact that these *objective* measures provide valuable information to assess public policies, they have important limitations. Fortunately, these problems may be tackled by complementing them with *subjective* well-being indicators. Subjective measures reflect people's own evaluations of the quality of their lives, and are more directly related to societies´ well-being. Therefore, they may assess different aspects that can't be obtained through traditional and objective measures, helping policy makers to obtain a more accurate picture of the well-being of both individuals and nations. Several examples are provided to support these claims.

Introduction

One of the most important duties for government is to increase people's quality of life through the provision of public goods. However, resources are limited and policy makers need to allocate them in the most efficient way. To fulfil this goal, many countries are currently using standard economic forms of cost-effectiveness or cost-benefit analysis to evaluate their policies. Despite this procedure having a lot of benefits, it is useful only when inputs and outputs can be estimated accurately in monetary terms (e.g., in the transport or work sectors). However, the economic activities in areas such as health, social care, the environment, and child welfare do not provide an accurate method to estimate the cost and benefits involved in the transactions. Thus in these cases, new methods need to be developed for evaluating public policies (Helliwell, Layard and Sachs, 2012).

Leading scholars have proposed to judge policies by the changes they produce in people's well-being (Diener et al., 2009). This method may help to align better the metric of traditional cost-benefits analysis with measures that truly represent the change in people's quality of live (Helliwell, Layard and Sachs, 2012).

However, this new alternative leads to a second problem: how can well-being be measured? Economists assume that well-being may be assessed through changes in Gross Domestic product (GDP), which would be a good proxy for it.

According to standard economic theory, individuals are rational decision-makers who always know what they want, and derive their utility (or well-being) mainly through the consumption of goods and services. Therefore, if GDP per capita increases, people on average will have higher incomes. This situation would allow individuals to increase their consumption and therefore their well-being. However, the traditional assumption about the link between income and well-being has been questioned in recent years (Easterlin 1974; 1995; 2003; Helliwell, Layard and Sachs, 2012; Stiglitz, Sen and Fitousi, 2010). Sachs (2012), for example, states that this assumption has several limitations. First, we are not always rational thinkers. We are a complicated mix of emotions and rational thought (Kahnemann, 2011). Second, higher average incomes do not imply necessarily higher well-being. For example, despite the fact that the GDP in the US is three times higher now than in the 1960s, the average life satisfaction levels have remained almost unchanged over the last 50 years (Sachs, 2012). Third, the increase in the US production has destroyed a great deal of our natural environment, leading us to a climate change crisis that may be irreversible in some years ahead (International Energy Agency, 2012). Fourth, social psychology research has consistently found that individuals who give great importance to income and material rewards, end up with a lower level of well-being and a higher level of mental problems (Dittmar et al., 2012; Kasser and Kanner, 2004). Thus it is a serious problem when government and policy makers give too much importance to production and economic growth instead of promoting more intrinsically motivating aspirations. Fifth, and finally, despite the fact that several countries have shown important improvement in the levels of affluence in recent decades, this issue has created its own set of afflictions. For instance, there are increasing levels of obesity, diabetes, eating disorders, and addictions, together with decreasing levels of community involvement and social trust (Sachs, 2012). All of these are examples of the dangers of focusing public policies mainly on economic growth, acquisition and material standards.

Therefore, it is extremely necessary a change in several destructive behaviour which are leading the world to financial, economic, social and environmental disasters. It is necessary to move from a paradigm based mainly on income and GDP, to a new model of development that better represents real changes in people's quality of life. However, it is almost impossible to get a change unless nations change the way they are measuring their economic performance, because what we measure affects what we do (Stiglitz, Sen and Fitousi, 2010). Thus, the world urgently needs to modify the way progress has been measured. A shift in the measurement system is a real priority. It is imperative a shift in emphasis from measuring economic growth to measuring what really matter: people's well-being and happiness (Helliwell, Layard and Sachs, 2012; Layard, 2011; Stiglitz, Sen and Fitousi, 2010). Yet there is no single measure that can

capture the complexity of the whole society. Thus, the goal is to build a set of metrics that better capture the most important factors that make a person's life worth living. The challenge is to complement our traditional economic measures of well-being with measures which reflect people's inner feelings and life evaluations.

Fortunately, most individuals agree that nations should pursue the happiness of their citizens. Novel research has supported these claims, pointing out the need for using happiness and subjective indicators to complement standard economic measures (Diener et al., 2009; Helliwell, Layard and Sachs, 2012).

A growing body of evidence has shown that a subjective experience of happiness can be objectively measured and related to the characteristics of an individual and the society. The most universally accepted standard framework for assessing happiness is through subjective well-being's measures (SWB; Diener, Emmons, Larson and Griffin, 1985).

Asking people about their subjective states provides key information for policy makers and governments (Layard, 2011; Sachs, 2012). Well-known institutions have supported this claim. For example, the Stiglitz Commission (Stiglitz, Sen and Fitousi, 2010, p.18) recommended that the statistical offices of the world should "incorporate questions to capture people's life evaluations, hedonic experiences and priorities in their own surveys". In addition, on 13/07/2011 a resolution of the United Nations (United Nations, n.d., p.1) invited Member States "to pursue the elaboration of additional measures that better capture the importance of the pursuit of happiness and well-being in development with a view to guiding their public policies".

The most important advantage of SWB measures for advising public policies is its subjective nature (Helliwell and Wang, 2012). Subjective questions allow people to talk about the quality of their own lives, reflecting their own histories, personalities and preferences. They reflect what people think is important and desirable, not what experts or governments think should define a good life. In other words, it is a direct personal judgment.

Despite the fact that economists have modern tools to contribute to the cost–benefit analysis, public economics theory needs radical changes. Public economics "fails to explain the recent history of human welfare and it ignores some of the key findings of modern psychology", in particular those that help understanding what make people happy (Layard, 2006, p.24). Therefore, in addition to standard measures of economic and social progress, governments should begin the systematic measurement of happiness and SWB to inform public policies in order to lead societies to the most desirable states. By

measuring SWB at the same time as traditional economic variables, societies can assess its real progress, and not just its material living standards (Diener, 2009).

Traditional social and economic indicators

Governments need to monitor their nations' well-being. However, well-being is a complex and multidimensional construct that includes several different domains (Stiglitz, Sen and Fitousi, 2010). Social and economic indicators are the most common *objective* measures that policy makers employ to monitor quality of life.

Social indicators

Crime rates, literacy, labour force participation, pollution, community vitality, and school performance are examples of social indicators. They allow societies to assess diverse well-being domains. However, despite providing key information for assessing the progress of a country, they have important limitations when used to evaluate peoples' and nation's well-being. Diener et al. (2009) point out the following concerns:

First, an important question arises as to when a country must decide which domains need to be monitored and which are the most important ones. This leads to further questions, such as: Who is the most appropriate person/institution to decide? How should the different domains be weighed? Which is more important, education or health? Should we spend more money on the army or in the internal police? To solve these problems, several methods have been proposed. However, no matter who takes the final decision, there will be always *external* participants involved. Therefore, some specific individuals or groups will decide, and this will always leave room for disagreements.

Second, objective lists of indicators assume that a finite set of domains should be included. However, when should governments stop collecting the indicators? Who should decide how much information we need? Are all the domains that are normally included important to overall well-being? Are some important domains consistently ignored? Who should decide about the way to measure the different domains correctly? These are all important concerns regarding objective measures.

Third, it is possible to face cultural problems. For example, not everyone values spirituality or community involvement to the same degree. If the differences are substantial, the results from national account systems will be biased and they will not properly reflect the well-being of the population.

Fourth, and finally, several measurement concerns may arise. First, despite the fact that some concepts might seem straightforward, they are several times difficult to define and measure. For example, it is easy to define corruption, but may be extremely hard to assess it. Second, the optimal level of some indicators is not always clear. For instance, how much volunteering work is needed in a society?

Most of the limitations mentioned above are due to the fact that objective indicators will always reflect a set of specific values, which belong to those involved in the measurement process. Thus, we may never achieve a perfect list and so additional criteria are needed to complement these traditional indicators. Further, SWB measures may help to complement the information provided by objective indicators, supplementing existing list-based accounts and making them more useful. Subjective measures reflect in a deep way how people evaluate their lives and the society they are living in. Such measures give us insights directly from the individual's perspective, avoiding external opinions, and providing the weights necessary to aggregate measures of quality of life. By using them, therefore, we may understand a wide range of aspects about what make someone's life worth living, which is a key advantage for policy makers and national governments (Diener et al., 2009; Helliwell, Layard and Sachs, 2012).

Economic indicators

Nations collect different kinds of economic indicators (e.g., GDP, inflation rates, employment, and poverty rates). Among them, GDP is the most widely used variable for measuring aggregate well-being. Standard economic theory hypothesizes that utility (or well-being) depends on the consumption of goods and services. Hence, if the level of income (or GDP per capita) increases, people will be able to buy more products, which in turns will lead to higher levels of utility. This is the main reason why economists assume that GDP changes reflect the progress in societies, and this measure has become the most popular economic indicator for assessing the well-being of nations (Sachs, 2012).

Despite GDP being the most widely used measure of economic activity and having been employed consistently to measure well-being, it only assesses market production. National income statistics were developed more than 70 years ago to provide a measure of the level of the market-based economic activity, but not for providing us with relevant information about how people evaluate their lives. For example, neither GDP nor the markets inform the government about people's sense of meaning or realization (Stiglitz, Sen and Fitousi, 2010).

GDP therefore shows the following limitations when used as a proxy of wellbeing (Stiglitz, Sen and Fitousi, 2010; Diener et al., 2009):

First, if societies face large income inequalities, GDP may not give an accurate picture. An increase in GDP does not imply that everyone is better off. For example, if inequalities increase enough relative to the increase in per capital average GDP, it is possible to observe a higher GDP, even if most citizens are worse off.

Second, objective economic indicators may not be capturing specific issues that affect peoples' quality of life. For example, GDP ignores several negative externalities related to the environment such as water and air pollution. GDP may increase through different activities that affect the environment, such as mining activities. However, when we take into account the depletion of resources and the negative effects on health and the environment, the citizens may end up worse off.

Third, different factors that affect people's quality of life positively (e.g., love, social capital, virtue and spirituality) cannot be incorporated into national economic accounts.

Fourth, there are some economic activities with economic value that have not been incorporated into the GDP accounts, but that they do improve our standard of living (e.g., housework, hobbies and volunteer work).

Fifth, black market activities are not included in the GDP accounts.

Sixth, prices may not always exist for some goods and services.

Seventh, GDP measures sometimes capture the increasing effect on the production of specific activities, but ignore the detrimental effects of such activities. For example, delinquency may increase the production of jails (and therefore may increase GDP), but it may be reflecting societal problems which mirror lower levels of well-being.

In addition to all the above-mentioned limitations, there is a key negative impact of using GDP as the main proxy for a nation's progress. Due to governments and policy makers stressing the importance of income and material standards as a pathway to foster societies' well-being, materialism has become a prominent problem for people's quality of life (Kasser and Kanner, 2004). Several studies have documented an increasing tendency to give great importance to the pursuit of extrinsic life goals (e.g., fame, money and image) instead of pursuing intrinsic aspirations (e.g., self-development, community

involvement and affiliation) as a pathway to happiness and well-being (Kasser and Ryan, 1993; 1996). However, it has been shown that this trend (called materialism) is highly correlated with several cognitive and affective problems, leading to lower levels of subjective well-being and various mental problems across nations (Dittmar, 2008; Dittmar et al., 2012).

Economists have recognized the limitations of the objective economic indicators. To tackle these problems, they have developed new and modern tools (e.g. revealed preferences and willingness to pay methods). However, these novel approaches tend to start from the same traditional assumptions (e.g., human rationality, link between utility and well-being, etc.). As a result, they show similar problems to those of the traditional indicators (Dolan, 2008).

All the information presented above leads to the conclusion that the traditional social and economic indicators need to be complemented with measures of well-being that truly represent people's own experiences. Different scholars have pointed out that subjective well-being indicators may be part of the solution (Diener et al., 2009; Helliwell, Layard, Sachs, 2012). Such indicators may provide a more accurate picture about how people evaluate their lives, thus enabling a more efficient use of the traditional measures.

Subjective wellbeing: Concept and dimensions

Subjective well-being is the scientific term given to the word happiness (Diener, 2009). It reflects whether people believe and feel that their lives are desirable, satisfying and rewarding. It normally consists of three central elements: satisfaction with one's life; frequent experience of positive affect; and the absence of negative affects (Diener, Suh, Lucas and Smith, 1999). However, the Organization of Economic Co-Operation and Development (OECD, 2013) has added recently the eudaimonic dimension – a sense of purpose in life and good psychological functioning. Therefore, SWB mirrors the individual's own evaluation of his/her life and. The construct is only evaluated as "good" if people think there is a match between their own ideals and their quality of life (Diener et al., 2009).

SWB covers a wide range of individual self-reports of affects and life evaluations. These self-reports have been questioned regarding what the data mean and whether they are useful. However, research has consistently shown that not only SWB measures are reliable, valid and can be used to compare individuals, nations and cultures (Diener et al., 2009; Helliwell and Wang, 2012). They also provide unique and valuable information for advising public policies (Dolan, 2008; Diener et al., 2009; Helliwell, Layard and Sachs, 2012).

Using subjective wellbeing indicators to inform public policies

Traditional economic and social indicators provide key information for government and policy makers. However, as shown above, they present several limitations to mapping people's and nations' quality of life. Fortunately, these limitations may be addressed through the incorporation of subjective measures to national accounts of well-being.

The use of SWB indicators has (at least) the following advantages when they are employed to inform public policies (Diener et al., 2009; Helliwell, 2008; Helliwell and Wang, 2012):

First, their main advantage is precisely their subjective nature. They reflect an individual's own perceptions and feelings about their quality of life, without been limited to assessments by others. They reflect what people think is important and desirable, and not what experts or governments think is a good life. They are therefore a direct personal and democratic way to evaluate people's judgments and reflect many other aspects of life that are not captured for traditional economic indicators such as GDP.

Second, as traditional objective indicators need specific criteria for weighting the different domains (e.g., to ascertain which one is the most or the least important), several concerns always arise regarding the best way to proceed. However, subjective measures avoid this important limitation. They reflect an overall evaluation of life where all the important aspects (conscious and unconscious) are already considered, and therefore they do not need external judgements. They provide a common metric that can be employed to compare outcomes across domains and across people. It is extremely useful when facing trade-offs such as having to decide between whether to spend extra funding on health or on education.

Third, and finally, they may help policy makers to modify risk behaviours (e.g., drugs abuse). Due to the fact that subjective evaluations of an individual's own life influence their behaviours, an understanding of such evaluations may help governments lo lead societies toward more desirable states.

Therefore, SWB measures may be extremely useful for policy makers to complement traditional objective indicators and for addressing the limitations of the later measures. By using SWB measures, economic measures can be balanced with measures of subjective well-being in order to ensure that economic growth will lead to broad improvements across life domains, and not just to higher incomes (Diener, 2009).

Policy examples using subjective wellbeing measures to inform public policies

Several examples have been found in the literature showing how subjective measures can be used in the real world to improve the quality of the policy decisions. Seven of them will be provided in this chapter.

Social capital and trust

Among the most important determinants of happiness are the quantity and quality of social relations in a community, normally referred to in the literature as social capital. They include the relationships with our family, friends and the community (Layard, Clark and Senik, 2012).

Trust plays a key role in building social capital. Therefore, trust above all between citizens, work places, and institutions strongly affects the individual and societal levels of happiness and well-being (Powdthavee, 2008; Meier and Stutzer, 2008). These are key findings to explain why life satisfaction has not risen in the US and UK, while it has improved considerably in Denmark and Italy. Levels of trust have fallen substantially over time in the former countries, but have risen in the latter ones (Layard, 2011; Layard, Clark and Senik, 2012).

Economic growth may bring several benefits to the inhabitants of a country, especially to developed nations where most of the population live in poverty (Helliwell, Layard and Sachs, 2012). However, we also know that systematic increases in GDP and globalization without the right policies to protect the people have contributed to generating detrimental effects on the quality of social relationships, to the weakening of a sense of community, and therefore negatively affecting people's well-being. Thus, it is extremely important to have the right account systems to monitor this trends and SWB may be of great help (Stiglitz, Sen and Fitousi, 2010).

One way of monitoring these effects is through subjective measures of well-being. If societies are evaluated only in terms of GDP, it will never be possible to understand completely how individuals and societies are performing. However, if we complement traditional indicators with happiness measures we can obtain a better picture. For instance, by using subjective measures, nations can understand the key associations between trust and social capital and fear, distrust, family infidelity and reduced social engagement. Therefore, subjective measures may help governments and policy makers to protect societies against undesirable states and improve the well-being of individual, families, communities and nations (Layard, Clark and Senik, 2012).

Moral debates

How can societies decided about the legalization of prostitution and gambling? Reasonable arguments can be made for and against these issues. However, the values of individuals or small groups are always involved, which may raise several concerns regarding the appropriateness of the specific decisions and policies. In these cases, SWB indicators – which reflect people's own values and life goals – are a democratic and fair way to decide. By asking people directly, there is no need for external judgements, and this way may provide useful insights in order to decide on the most desirable actions for policy makers to follow (Diener et al., 2009).

Learning about the danger of materialism and advertising

Every day we are bombarded with thousands of messages telling us how important income and material possessions are for our own happiness and well-being (Kasser and Kanner, 2004). However, researchers has consistently found that the higher the materialism – a strong relative importance attached to material rewards – the higher the individual's mental problems and the lower people's life satisfaction, vitality and positive emotions (Dittmar et al., 2012; Kasser and Ryan, 1993; 1996).

Advertising plays a key role in this problem. Despite the fact that some advertising provides valuable information, a lot of them make people to need things that they previously didn't need. The result is making individuals want more and be less satisfied with what they have. These effects are especially dangerous for children below the age of 12 (Layard, Clark and Senik, 2012). Parents face intolerable pressures to buy, and children start from very early ages to think that they need material rewards to be happier. Every country should learn from these findings in order to implement public policies to protect young populations (Layard, 2009).

According to standard economic theory, consumption is one of the key elements for economic growth and progress. Therefore, if advertising and consumer culture increase people's spending, it would lead to a higher level of GDP, and well-being. However, again, if societies evaluate their well-being solely through economic indicators, they will never be able to see the whole picture. In the case of materialism, it would be almost impossible to understand the risk associated with giving great importance to money and economic indicators without using SWB measures.

Thus, learning about the dangers of materialism through subjective measures may help governments to take better decisions (Diener et al., 2009). By complementing standard economic indicators with subjective measures of

quality of life, governments may evaluate different policies to ameliorate the negative effects of strong material aspirations on people's well-being.

Health

Resources are limited and medical care always needs to be rationed, through different mechanisms. A common strategy to allocate scarce resources is through traditional economic cost-benefit or cost-effectiveness analyses.

Health economists have developed several methods to evaluate the quality of life associated with different diseases. These methods often follow economic approaches to assess nonmarket goods. *Revealed preferences* are one such method. It assesses the amount of money that an individual currently spends in the market to correct his/her health problems. However, because market behaviour cannot always be observed for avoiding health-related problems, the *willingness to pay* method has become one of the most popular (Diener et al., 2009; Dolan, 2008). Within this framework, economists recommend measuring health improvements by asking the general public "to imagine themselves in different states of health and then to think about how many years of life they would give up or what risk of death they would be willing to accept in order to be in full health" (Dolan, 2008, p.69). However, several problems arise with these strategies. First, who is the appropriate respondent for the surveys (general public, medical practitioners, or people affected by disease)? Different participants may provide completely different answers, many of them based only on stereotypes or misinformation (Diener et al., 2009). Second, preferences are not a very good guide to future experiences. When answering, participants will be focused on their state of health. Yet even if people have a health problem, there are many other aspects that determine their quality of life and that will not be affected by a disease (e.g. family, friends, work, etc.). People are not able to see these other aspects when answering the questions (Dolan, 2008). Therefore, despite the useful information that these modern *hypothetical decision method*s may provide, their limitations need to be addressed. To solve these problems, Dolan (2008) suggests looking for more direct measures of experiences, such as SWB measures. The procedure will start, therefore, by asking participants firstly to describe their health; then, to control for some factors that are known to be associated with SWB (income, marital status, etc.); finally, to estimate the effect that different health states have on subjective well-being. Once the effect of the disease on people's life satisfaction is estimated, it may be possible to calculate how much income would be necessary to give people with a disease the same life satisfaction as people without that illness. Groot, Maassen and van den Brink (2007) suggest that if the disease could be treated for less than the estimated amount of money, society would be facing a good trade-off. This method can also be employed to analyse different

treatments for the same disease. Methods that show the highest increase in SWB (keeping the costs constant) should be selected.

Therefore, through assessing the improvement in quality of life produced for different interventions, SWB measures may provide a useful metric to evaluate health spending, allowing policy makers to allocate resources efficiently.

Externalities

The production and exchange of market goods may affect – positively or negatively – people not directly involved in the transactions. This effect is called *externality* (Ayres and Kneese, 1969). Its basic causes are that "whereas the costs and benefits of economic activity are social, the laws of private property bestow the privileges and benefits on particular individuals while imposing only a part (and often a small part) of the social costs on these same individuals" (Hunt and d'Arge, 1973, p.151).

Economists have developed several methods to value the externalities effects, but none of them are perfect (Hunt and d'Arge, 1973). For instance, suppose that a government is planning to build a new airport. How can the effects of airport noise on the quality of life of people living in the affected area be evaluated? A traditional economic method normally employed is to compare the prices of houses located in areas with different aircraft noise, under the assumption that price differences would reflect the change in quality of life. However, these market-based assessments have several limitations. For example, price markets must adjust rapidly to allow valid comparisons, but housing market prices tend to move very slowly due to market restrictions, price controls, or other factors. Second, buyers may underestimate the effect of airport noise, and so prices may not reflect appropriately the negative effect on peoples' quality of life. Decisions are based on perceived impact rather than on objective standards. Therefore, despite the fact that some traditional economic methods may help to understand peoples' prediction about the noise, they fail when estimating the real effects.

Fortunately, happiness research has addressed these limitations and SWB measures may be employed to complement traditional procedures.

In a key study, Van Praag and Baarsma (2004) compared self-reported life satisfaction measures of people living in areas with different airport noise. They showed that it is possible to assess the monetary value of the airport noise damage as the sum of hedonic house price differentials and a residual cost component. The residual costs component was estimated from the effect on life satisfaction. This novel method not only provides an accurate estimate of the effect of noise, based on experience utility (Kahneman, Kahneman and Tversky,

2003), but also gives policy makers important information about different possible alternatives to compensate people affected by the externalities. For example, it is possible to determine the amount of money to be paid. The procedure is simple. First, the effect of noise on life satisfaction needs to be evaluated. Then, using the known association between income and life satisfaction it would be possible to determine a reasonable amount of money to compensate the neighbours in the affected area.

Helliwell and Huang (2011) proposed the *compensating differentials* method to estimate externalities effect. They recommend to start by assessing the effect of the externalities on life satisfaction. Then, using the well-known association between income and life satisfaction, to measure the equivalent change in income due to the external effects. This procedure may be extremely useful for policy makers trying to decide how to compensate the population for economic activities where they are not directly involved.

Frey, Luechinger and Stutzer (2004) also showed that it is possible to assess the influence of different government policies (e.g., building a highway) even if the market does not provide the necessary information. They proposed to measure the impact of the government actions on the quality of life of the affected area through SWB indicators. After evaluating the latter effect, they compared the effect of money on SWB in order to estimate the final effect of the noise externality on income.

Finally, Luechinger and Raschky (2009) studied how to apply SWB measures for assessing natural disasters, They compared this method with traditional methods to evaluate the losses caused by floods disasters in 16 European countries between 1973 and 1998. They found that life satisfaction data provided enough information to be used as an additional tool in the area of non-market valuation.

In summary, several public goods and services (e.g., better roads, day centres for the elderly, public squares, and parks) produce costs or benefits that are not easily captured through traditional economic and social indicators, but they may improve or diminish the citizens' quality of life substantially. Therefore, measuring cost and benefits through their change in people's SWB may help policy makers to set up different options in order to mitigate the negative effects of externalities, and to allocate resources to the most convenient cost-effective alternative (Diener et al., 2009).

Unemployment

For those who lose their jobs, unemployment has serious financial implications. Under the economic assumption that income is related to utility, job loss should

lead to lower levels of well-being. However, the main impact of unemployment on well-being goes beyond the loss of income (Stiglitz, Sen and Fitousi, 2010). It produces a loss of social status, self-esteem, workplace social life, and confidence, and diminishes other factors that matter for a good quality of life (Layard, Clark and Senik, 2012).

Working has non-pecuniary benefits such as sharing experiences and being in contact with people outside the family, having goals and purposes that transcend the individual, personal status and identity, and the enforcement of activity (Jahoda, 1988). Unemployment destroys all these benefits (Layard, Clark and Senik, 2012).

Unemployment also produces detrimental effects not only on family members, but also in communities where people live (Diener et al., 2009). For instance, Catalano, Dooley, Novaco, Wilson and Hough (1993) found that unemployment may increase the violence in communities.

Unemployment also matters for employees. The effects of extreme job insecurity and of unemployment have a serious detrimental effect on those who are still working (Green, 2011). It has been found that the loss to the other employees is twice as great as the loss to the unemployed themselves when the whole population is talking into account (Helliwell and Huang, 2011).

In a meta-analysis, Paul (2005, in Diener et al., 2009) found that unemployment was strongly associated with mental health problems, and that the losses cannot be only by the loss of money. Paul's meta-analysis also confirmed that the negative effects are greater for working-class employees, for countries with higher income inequalities, and for nations with lower levels of unemployment protection. This study gives important recommendations for public policies aimed at protecting people's well-being (Diener et al., 2009).

Therefore, standard economic measures regarding unemployment are incomplete as they focus solely on the loss of income. For example, reforms in the work place may lead to market efficiency and economic growth, but may also lead to lower job satisfaction and therefore to a reduction in SWB (Stiglitz, Sen and Fitousi, 2012). However, incomplete traditional measures may be improved by complementing them with SWB indicators. SWB measures may give us a more accurate picture of the problems associated with the job loss, advising policy makers about how to determine the best alternatives to help people recover from unemployment, both psychologically and economically. Studying peoples' judgements about their lives may give us important insights into the underlying process that regulates the association between well-being

and unemployment, in order to create policies to protect workers, their families and their communities from the negative effects of job loss (Diener et al., 2009).

Tax structures

Governments require resources in order to take care of the responsibilities that citizens have given to them (e.g. education, health, justice). Taxation is the most common source of income. However, the question about what is the best tax structure always arises. For example, which is the best structure? A progressive or a proportional tax system? Decisions are normally based on empirical and theoretical evidence regarding the maximum amount of money that governments can obtain through different tax systems (Stiglitz, 1988). However, it has been shown that a tax burden also has psychological effects on people's well-being (Cullis and Lewis, 1997; Layard, Clark and Senik, 2012).

Happiness research tends to support progressive tax structures, with two arguments (Layard, 2009; 2011). First, we know that life satisfaction is positively correlated with income. However, we also know that every additional dollar brings less and less life satisfaction (decreasing marginal utility). Thus, the same taxation produces less cost to higher incomes than to lower ones. Second, progressive taxes are justified due to the negative effect that the pursuit of higher levels of income has on well-being. Decreasing aspirations and materialism may lead to a happier society.

Thus, public policies need to pay attention to SWB measures when deciding on the most appropriate tax structure. SWB may help policy makers to set up the optimal tax structure that will maximize the well-being of the people. The loss of well-being may be calibrated for different level of taxation to find the taxation level that will maximize SWB in a nation. Using SWB measures may help to collect money in an efficient manner at the same time as supporting economic growth and equitable distributions (Diener et al., 2009).

Concerns regarding subjective wellbeing measures

In this chapter we have highlighted the advantages of using SWB measures to inform public policies. However, several clarifications need to be made.

First, just as traditional objective social and economic indicators present limitations, so do SWB measures (Dolan, 2008). Therefore, although it is extremely important to understand more about happiness, such measures will be of little help unless they can be combined with other sources of relevant information (Helliwell and Wang, 2012). For example, the OECD's recent accounting for well-being included many other variables (apart from SWB indicators) to monitor the progress in societies. Thus, "Objective and subjective

indicators of wellbeing are both important" (Stiglitz, Sen and Fitousi, 2010, p.15).

Second, SWB is based on people's values and ideals (Diener et al., 2009). Therefore, an important concern regarding its use relates to the possibility that individuals' preference may be manipulated (Diener et al., 2009). For example, if underprivileged people are not aware about the existence of better life conditions, they will not have a preference for these objectively better states. If preference does not exist, both groups may show similar SWB levels even though richer citizens may have better objective living standards than poor people. Therefore, a negative incentive may have governments to manipulate people's preferences and/or knowledge. This is another reason to argue that SWB cannot be the only method for evaluating public policies. The best approach is to consider objective and subjective indicators in order to protect societies from the above-mentioned possibilities of preference manipulation.

Third, it has been stated that people may answer surveys and self-reports strategically in order to influence public policies. Individuals may change their responses in order to attract the attention of government and resources (Diener et al., 2009). This concern is common in behavioural science research, because people may change their opinions to influence the results of the studies. However, there are some methods to avoid such problems. For example, carefully developed surveys may hide the main purpose of the study. In addition, if policy makers regularly test a large number of participants, it appears to be difficult for small groups to succeed in manipulating surveys (Diener et al., 2009).

Despite the above-mentioned limitations, SWB concerns are different from the social and economic measures problems. Further, it is extremely important to complement them with the existing traditional well-being indicators in order to obtain a more accurate picture of the societies concerned (Diener et al., 2009; Dolan, 2008).

Conclusion

Modern nations usually employ standard social and economic indicators to allocate limited resources and to measure societies' well-being. Traditional economists and policy makers have assumed that all the activities in societies (consumption, production, externalities, etc.) may be measured in terms of monetary cost and benefits, but that also the objective indicators – especially GDP – reflect the desirable aspects which a nation wants to achieve. However, two main concerns arise. First, not all market activities may be measured in terms of money. Second, despite the fact that traditional measures of progress provide useful information to government, business, communities, and

individuals, they show only a few aspects of the quality of life for people and nations (Diener et al., 2009; Stiglitz, Sen and Fitousi, 2010).

Therefore, standard measures of progress need to be complemented with measures that better represent changes in quality of life: measures of people's wellbeing and happiness (Helliwell, Layard and Sachs, 2012; Layard, 2011; Stiglitz, Sen and Fitousi, 2010). Novel research has supported these claims, pointing out the need for using happiness and subjective indicators to complement standard economic measures (Diener et al., 2009; Helliwell, Layard and Sachs, 2012). By complementing classical objective indicators with subjective measures of the quality of life, policy makers can obtain a more accurate picture of the well-being of both individuals and societies (Diener et al., 2009).

Several examples have been provided to demonstrate that SWB indicators may be extremely useful for governments when trying to decide the best policy actions (Diener et al., 2009). Thus, governments should start systematically collecting a wide range of measures reflecting peoples' SWB in order to lead nations to the most desirable estates.

References

Ayres, R. U. and Kneese, A. V., 1969. Production, consumption, and externalities. *The American Economic Review*, 59(3), 282-297.

Catalano, R., Dooley, D., Novaco, R., Wilson, G. and Hough, R., 1993. Using the ECAdata to examine the effect of job layoff on violent behaviour. *Hospital and Community Psychiatry*, 44, 874–887.

Cullis, J. G. and Lewis, A., 1997. Why people pay taxes: from a conventional economic model to a model of social convention. *Journal of economic psychology*, 18(2), 305-321.

Diener, E. and Seligman, M. E. P., 2004. Beyond money: toward an economy of well-being. *Psychological Science in the Public Interest, 5,* 1-31

Diener, E., 2009. *The collected works of Ed Diener*. The Netherlands: Springer.

Diener, E., Emmons, R., Larsen, J., & Griffin, S., 1985. The satisfaction with life scale.

Journal of Personality Assessment, *49*(1), 71-75.

Diener, E., Helliwell, J. and Kahneman, D. eds., 2010. *International differences in well-being*, Oxford, Oxford University Press.

Diener, E., Lucas, R., Schimmack, U. and Helliwell, J., 2009. *Well-being for public policy*. Oxford: Oxford University Press.

Diener, E., Suh, E. M., Lucas, R. E., & Smith, H. E., 1999. Subjective wellbeing: three decades of progress. *Psychological Bulletin*, 125, 276-302.

Dittmar, H., 2008. *Consumer culture, identity, and well-being: the search for the 'good life' and the 'body perfect'*. European Monographs in Social Psychology Series, Hove & New York: Psychology Press.

Dittmar, H., Bond, R., Kasser, T. and Hurst, M., 2012. The Relationship between Materialism and Personal Well-Being: A Meta-Analysis. Manuscript submitted for publication.

Dolan, P., 2008. Developing methods that really do value the 'Q'in the QALY'. *Health economics, policy and law*, 3(1), 69.

Dolan, P., Peasgood, T. and White, M., 2008. Do we really know what makes us happy? A review of the economic literature on the factors associated with subjective well-being. *Journal of Economic Psychology*, 29(1), 94-122.

Easterlin, R. A., 1974. Does economic growth improve the human lot?. *Nations and Households in Economic Growth*, 125.

Easterlin, R. A., 1995. Will raising the incomes of all increase the happiness of all? *Journal of Economic Behaviour & Organization*, 27(1), 35-47.

_____ 2003. Explaining happiness. *Proceedings of the National Academy of Sciences*, 100(19), 11176-11183.

Frey, B., Luechinger, S. and Stutzer, A., 2004. *Valuing public goods: the life satisfaction*

Green, F., 2011. Unpacking the misery multiplier: How employability modifies the impacts of unemployment and job insecurity on life satisfaction and mental health. *Journal of health economics*, 30(2), 265-276.

Groot, W., Maasen and van den Brink, H. M., 2007. Optimism, pessimism and the compensating income variation of cardiovascular disease: A two-tiered quality of life stochastic frontier model. *Social Science & Medicine*, 65(7), 1479-1489.

Helliwell, J. F. and Huang, H., 2011. Well-being and trust in the workplace. *Journal of Happiness Studies*, 12(5), 747-767.

Helliwell, J. F., 2008. *Life satisfaction and quality of development*. National Bureau of Economic Research, working paper No.14507.

Helliwell, J.F, Layard, R. and Sachs, J. eds., 2012. *World Happiness Report*. New York: The Earth Institute, Columbia University.

Helliwell, J.F, Layard, R. and Sachs, J., 2012. Some policy implications. In: J.F. Helliwell, R. Layard and J. Sachs, eds. *World Happiness Report*. New York: The Earth Institute, Columbia University.

Helliwell, J.F. and Wang, S., 2012. The state of world happiness. In: J.F. Helliwell, R. Layard and J. Sachs, eds. *World Happiness Report*. New York: The Earth Institute, Columbia University.

Hunt, E. K. and d'Arge, R. C., 1973. On lemmings and other acquisitive animals: Propositions on consumption. *Journal of Economic Issues*, 337-353.

International Energy Agency, 2012. *Tracking Clean Energy Progress,* Energy Technology Perspectives 2012 excerpt as IEA input to the Clean Energy Ministerial, viewed 30/04/2012, from http://www.iea.org/papers/2012/Tracking_Clean_Energy_Progress.pdf

Jahoda, M., 1988. Economic recession and mental health: Some conceptual issues. *Journal of Social Issues*, 44(4), 13-23.

Kahneman, D., 2011. *Thinking, fast and slow*. Farrar, Straus and Giroux.

Kahneman, D., Kahneman, D. and Tversky, A., 2003. Experienced utility and objective happiness: A moment-based approach. *The psychology of economic decisions*, 1, 187-208.

Kasser, T. and Kanner, A. D., 2004. *Psychology and consumer culture: The struggle for a good life in a materialistic world*. Washington, DC, APA.

Kasser, T. and Ryan, R.M., 1993. A dark side of the American dream: Correlates Of financial success as a central life aspiration. *Journal of Personality and Social Psychology*, 65, 410-422.

_____ 1996. Further examining the American dream: Differential correlates of intrinsic and extrinsic goals. *Personality and Social Psychology Bulletin,* 22, 280-287.

Layard, R., 2006. Happiness and public policy: a challenge to the profession. *The Economic Journal*, 116(510).

_____ 2009. Afterword: The greatest happiness principle: its time has come. In: S. Griffiths and R. Reeves, eds. *Well-being: How to lead the good life and what government should do to help*.

_____ 2011. *Happiness: Lessons from a New Science*. 2nd ed. New York: The Penguin Press.

Layard, R., Clark, A. and Senik, C., 2012. The causes of happiness and misery. In: J.F. Helliwell, R. Layard and J. Sachs, eds. *World Happiness Report*. New York: The Earth Institute, Columbia University.

Luechinger, S. and Raschky, P. A., 2009. Valuing flood disasters using the life satisfaction approach. *Journal of Public Economics*, *93*(3), 620-633.

Meier, S. and Stutzer, A., 2008. Is volunteering rewarding in itself? *Economica*, 75(297), 39-59.

OECD, 2011, *OECD Better Life Initiative*. Compendium of OECD well-being indicators, Organization of Economic Co-Operation and Development.

_____ 2013, *OECD Guidelines on Measuring Subjective Well-being,* Organization of Economic Co-Operation and Development Publishing.

Powdthavee, N., 2008. Putting a price tag on friends, relatives, and neighbours: Using surveys of life satisfaction to value social relationships. *Journal of Socio-economics*, 37(4), 1459-1480.

Sachs, J., 2012. Introduction. In: J.F. Helliwell, R. Layard and J. Sachs, eds. *World Happiness Report*. New York: The Earth Institute, Columbia University.

Stiglitz, J. E., 1988. *Pareto efficient and optimal taxation and the new welfare economic*s.

Stiglitz, J. E., Sen, A. and Fitousi, J., 2010. *Mismeasuring Our Lives: Why GDP Doesn't Add Up*, New York, N.Y.: New Press

United Nations, n.d. *UN General Assembly Resolution A/65/L.86*, view on 02/05/2013 from http://www.un.org/depts/dhl/resguide/r65.shtml

Van Praag, B. and Baarsma, B. E., 2004. Using happiness surveys to value intangibles: the case of airport noise. *The Economic Journal*, 115(500), 224-246.

Chapter 5: Happiness and Public Policies: Fundamental Issues[1]

— Bruno S. Frey

Introduction

Research on happiness or subjective wellbeing has recently received considerable attention from inside and outside academia. The findings are of direct relevance for economic development. In particular, the effect of income growth on happiness is of utmost importance. Some prominent authors – notably Richard Easterlin – have argued that a rise in income does not raise happiness due to adaptation and comparison effects. This is called the "Easterlin paradox". If it held true – the finding ischallenged by other happiness researchers – development policy would have to change. The main goal would no longer have to consist in raising real per capita income in poor countries. Rather, different objectives would have to beconsidered – but which ones?

Even if the "Easterlin paradox" was not true, the problem would remain. It is difficult to findany serious happiness researcher who claims that happiness grows linearly with per capita income. Happiness research has clearly established that there are diminishing marginal returns to higher income in terms of subjective wellbeing. At the same time, research has established that there are other crucial determinants of happiness that are relevant in the process of economic development. Personal health and social relatedness are examples at the individual level, while political participation rights and decentralized decision making structures are important determinants at the aggregate level. Unemployment is relevant both at the individual and at societal level because even persons holding a job fear losing it when the general unemployment rate is rising.

Governments have paid great attention to the results of happiness research, thus marking one of the rare instances when politicians actually react to insights from academia. A "happiness policy" has been explicitly proclaimed in countries such as Great Britain, France, Germany, and even China. The Kingdom of Bhutan was a forerunner in this respect. The objective ofgovernment policy is no longer taken to be development in terms of a

---

[1] This report is based on recent work by the author and co-workers on the political economy of happiness policy, in particular Frey and Stutzer 2009, 2012, Frey 2011a, Frey and Gallus forthcoming a) and b). These publications provide extensive sources supporting the statements made in this report.

growing Gross National Product (GNP), but it rather consists in raising, if not maximizing, a National Index of Happiness.

This report analyses whether such an aggregate or National Happiness Index is a better guideto development than GNP or other indices of development – such as the "Human Development Index". I argue that when the National Happiness Index becomes the official goal of policy, it will be distorted by political interests. The respondents to surveys will resort to strategically answering the questions posed. Even more importantly, the government in power will manipulate the Index so as to further its own interests. As a result, the National Happiness Index will lose its informational quality and will therefore no longer serve as a reliable measure of happiness in the process of development.

The present report deals with five specific issues:

1. Government has considerable incentives and possibilities to distort the National Happiness Index;
2. Existing material indicators of economic development (such as GNP) are less subject to such distortions;
3. There exist various means to reduce the distortions of the Happiness Index, especially at the constitutional level of decision making; however, the politically induced distortions cannot be fully eliminated;
4. The National Happiness Index should be in competition with other happiness indices provided by other groups in society that are independent of government. It is mistaken to assign an exclusive role to the National Happiness Index.
5. The various happiness indices should be used in conjunction with existing material indices of development.

As should have become clear, this report does not compare the construction of the various subjective and material indices of development as such. There is an extensive literature devoted to this task already. Rather, the focus will lie on the indices from the point of view of political economy, an approach that has so far largely been disregarded.

Section I shortly discusses the incentives and possibilities of individuals to strategically misrepresent their preferences when asked in happiness surveys. Section II is devoted to themore important influence exerted by government when manipulating the National Happiness Index. The following section considers the possibilities to mitigate such manipulation of the National Happiness Index. Section IV concludes by suggesting what index or indices should be used to analyse development and to formulate adequate policies.

Indices and strategic misrepresentation

The material development indices such as the Gross National Product (GNP) or the Human Development Index are constructed on the basis of objective data. An outside person, such asa statistician, can observe and measure these data. In the case of the most important measure of development, national income or GNP, the data are derived from market interactions. It is defined as the total turnover (the quantity of goods and services consumed and invested times their respective prices, which in equilibrium reflect marginal utilities) minus the costs necessary to produce these goods and services. The total value added corresponds to the GNP. While there are other parts of the GNP that cannot be observed on the basis of market transactions (in particular the value added by the public sector), GNP measures the preferences or utilities revealed by individuals through their behaviour. Individuals have little incentive to misrepresent their consumption or investment behaviour because this would impose costs on them. They would then no longer consume or invest in those goods and services that maximize their own utility. The measure of the components of the GNP based on market transactions therefore truthfully reflects the utilities of the individuals in society. In contrast, happiness data are based on the responses of individuals in representative oralsurveys. It is well established that these answers are reliable (see e.g. Frey and Stutzer 1999, Diener 2009, 2011). The respondents truthfully reveal their state of happiness. They have little incentive to falsely report it. As a result, the subjective answers correspond well to what most people associate with a particular state of happiness. Thus, happy persons smile more in interactions with other persons, they are more open and optimistic, they are considered to be more agreeable work colleagues, they sleep better and they are in better health and live longer (Diener and Chan 2011, Frey 2011b). Conversely, unhappy persons have more problems at their work place, they seek more psychological treatment and they are more prone to commit suicide. Moreover, the happiness level they indicate tends to correspond to the one that close relatives and friends would attribute to them.

The truthfulness of the subjective happiness levels stated in representative surveys changes dramatically *once National Happiness has become an official policy goal of the government in power*. When this is the case, *individuals have an incentive to misrepresent their happiness level* for strategic reasons: they become motivated to support or to punish the politicians in power. Assume that an individual with a left-wing ideology living under a right-wing government is asked how happy she is. As happiness has become an official goal of that government, she is inclined to state that she is less happy than she actually is. She therewith signals her disapproval of the politicians in power. Conversely, a right-wing person living under a right-wing government has an incentive to state that he is

happier than he actually is. He therefore wants to signal that he approves of the politicians in power. The individuals asked can misrepresent their state of happiness at low cost because their true state of happiness remains hidden. The cost of misrepresentation consists at best in the moral qualms of having stated a wrong happiness level. It can well be assumed that most people are little bothered by these moral costs, so that the cost of misrepresenting their happiness level is nil. Introducing happiness as an official government goal therefore systematically biases the stated happiness levels. However, it is not a priori possible to see in what direction the National Happiness Index is therewith distorted. This depends on the extent of the upward or downward misrepresentation by individuals as well as on the size of the various groupsengaging in such misrepresentation.

Manipulation by government

Once National Happiness has become an official policy goal of the government, the politicians in power have a strong incentive to manipulate economic indicators such as the rate of unemployment, the rate of inflation, the level and growth rate of national income, the current budget deficit and the size of the public debt[2]. They do so because they are aware that it is not only the actual experiences that count for the citizens when they vote. A typical citizen has only very limited direct experience with respect to these economic factors. He therefore has to use perceptions about the state of the economy. These perceptions are considerably influenced by the media, which propagate the official statistical figures provided by government.

It is not rare that governments manipulate the statistics that are released and engage in "creative accounting" – in particular when trying to hide undesirable economic facts (see, e.g., Balassone et al. 2007, Buti et al. 2007, *Sachverständigenrat zur Begutachtung der gesamtwirtschaftlichen Entwicklung* 2009 and European Commission 2010). For instance, governments rarely communicate the implicit public debt, which includes future expenditures that have formally been promised (e.g. health benefits). Moreover, they can hide part of the public debt by outsourcing it to bodies that do not directly belong to government. Yearly budget deficits have also been considerably understated in some countries' public accounts (for instance in the case of Italy and Greece); a fact that has become particularly visible during the present financial and economic crisis. In California, such accounting tricks have repeatedly been used to obscure the yearly budget deficit, thus allowing the state to meet theconstitutional requirements (*The Economist* 2012a). Likewise, the long-term unemployed are excluded from many statistics. This allows governments to

---

[2] See, e.g., Dafflon and Rossi 1999, Forte 2001, Koen and Van den Noord 2005, Milesi-Ferretti 2004 and von Hagen and Wolff 2006.

publish unemployment rates that are lower than they are in actual fact (see e.g. Gregg 1994 and Webster 2002). Inflation figures can be manipulated in a similar vein, as has been revealed for example in the case of Argentina (*The Economist* 2012b): while the official rate of inflation lies at 9.7%, the real rate amounts to approximately 24%. As concerns the important measure of national income, it has been pointed out that some governments have resorted to including parts of their country's shadow economy – yet, the extent to which this has happened is still unknown (see, e.g., Schneider and Enste 2002, Torgler et al. 2010 and Schneider 2011). These examples suggest that the manipulation of particular economic indicators is widespread. It may even be argued that it is the rule rather than the exception (although that is of course denied by governments).

Politicians have an even stronger incentive to manipulate the National Happiness Index in their favour than they have in the case of the economic indicators just mentioned. After all, it represents the self-declared unique goal of policy to which all policies are subservient. Citizens therefore focus on the development of that index and so will the media. It is to be expected that the political discussion will be dominated by changes in that index, which purports to capture the overall wellbeing of the population. The government will hence make a great effort to manipulate it in its favour. It is strongly motivated to prevent a decline in the National Happiness Index. To this end, it can undertake policies improving actual conditions – for instance by reducing the rate of unemployment – and therewith raising the Index. Yet, it can also endeavour to manipulate the Index without improving the actual wellbeing of the population. The government can even actively try to push up the Index to indicate a happiness level that in reality does not obtain. The possibilities to do so are manifold. This is primarily the fact because the National Happiness Index is based on subjective evaluations of respondents to surveys. These can be manipulated more easily than indicators based on more objective data, such as the Gross National Product. For instance, the responses can be influenced by the order of the questions (Deaton 2011). Previously asking respondents about the political situation can for example lead to an average reported happiness score that is lower than it would otherwise be. Furthermore, "outliers" reporting extremely low levels of happiness can easily be excluded, arguing that they have not been serious when confronted with the questions (Simmons et al. 2011). Such subjective data also incite even more outright cheating on the part of government. The deletion of extremely low responses and the invention of some more responses that indicate high levels of happiness can hardly be detected.

It may be concluded that if people´s subjective well-being, as captured by the National Happiness Index, is declared the unique goal of policy, the government in power has a strong incentive – and a broad set of possibilities –

to manipulate this National Happiness Index in its favour. As a result, the Index will no longer serve as a reliable indicator of the population's wellbeing.

Improving the reliability of the National Happiness Index

The discussion has so far assumed that the government is unconstrained: it has the power to undertake all possible manipulations of the National Happiness Indicator that it considers to be in its interest. This condition holds for a dictatorial or authoritarian political system and is therefore relevant for many economically less developed countries. But even these governments to some extent need the support of their population. Dictators, for instance, are restrained in their actions by the risks of either a political uprising or passive resistance by the population. The economic base on which such regimes rely in order to subsist is also threatened by an exodus of the economically most productive and creative members. History shows that it is exactly authoritarian governments that use the most intensive propaganda to cajole their citizens. This fact has been well captured in Huxley's *Brave New World* (1932). Such governments will therefore put extreme effort into manipulating the National Happiness Indicator in their favour.

Politicians in democratic countries may possibly be as power-ridden as authoritarian rulers, but they are more constrained by constitutional rules. Their power is limited by an open society based on the rule of law, free media and a civil society in which individuals may form their own organizations and groups, including political parties. In a democracy, the government's means of manipulating the National Happiness Index are limited. Attentive and independent media have an incentive to reveal instances when the government manipulates the Index in its favour. However, as argued above, there are still many possibilities to influence the National Happiness Index, some of which are difficult or even impossible to detect.

Another constraint on the government´s possibilities to influence the National Happiness Index may be exerted by experts – in so far as they are independent of the government. Free universities serve this function. But again, not too much can be expected. While academics might have the possibility to find out to what extent the government manipulates the Index, they may refrain from doing so in order to not compromise their own careers. If they criticize the government for having manipulated the Index, they may receive less government funds for their research and they may not be offered attractive policy positions anymore.

Yet another possibility to restrain the government´s influence on the National Happiness Index is to delegate its construction to an independent Statistical Office, instead of an office close to the president or prime minister. This solution resembles the idea that monetary policy should be undertaken by an

independent central bank. However, experience shows that few, if any, national banks are in fact – and not just on paper – independent. The recent financial crisis reveals that even central banks that are formally independent tend to be subservient to the government's wishes. It is an illusion to think it was possible to completely isolate a public institution from the political power play.

A solution for overcoming the strong incentives and possibilities of government to manipulate the National Happiness Index must be sought on a more basic level; namely, the constitutional setup of a democratic society. Such an approach fundamentally transforms the concept of a National Happiness Index.

In a democracy, each citizen has the possibility to influence the political process and the political outcomes in (free) elections. In direct democracies, citizens can even exert a direct influence – by expressing their preferences via popular initiatives and referenda. The discussion of economic and social issues is furthered by the competition among newspapers, radio and television, as well as by channels such as Facebook, Twitter and other Internet forums. The dominant position of the National Happiness Index produced by the government is undermined by additional happiness indices offered by civic interest groups, such as trade unions or environmental groups. If that occurs, competition between various happiness indices emerges and the monopolistic position of "the" National Happiness Index disappears. Each group that offers its specific index of social wellbeing is forced to argue why, and in what respects, it captures important aspects of people´s happiness.

The discussion has led us to a perhaps unexpected conclusion: the construction of "a National Happiness Index" is unwarranted in a democratic society. Rather, the construction of many different happiness indices, coupled with an intensive discussion of their strengths and weaknesses, is the adequate way to deal with the issue of happiness in a free society. The competition between various ways of capturing and aggregating the subjective wellbeing of individuals is the essence of democracy. In contrast, it is mistaken to believe that one single National Happiness Indicator was able to reflect the many different preferences and interests in an open society. Such an exclusive Index would be manipulated by government. To pursue, or even to maximize, "the" national happiness corresponds to a technocratic view of society.

What indicators for development?

Economic and social development cannot be captured by one single indicator. The recent propagation by some governments of *one and only* National Happiness Index as the ultimate indicator of development is incorrect. As argued in this report, such a unique indicator will beeven more strongly manipulated by governments than the existing main economic indicator, the

Gross National Product, or the partial economic indicators such as unemployment, inflation, the budget deficit or the size of public debt. Due to the strong incentives and the extensive possibilities to manipulate the National Happiness Index, which is based on subjective survey data, an officially proclaimed National Happiness Index will lose much of its informational content. It will no longer reflect the state of subjective wellbeing in a society.

The manipulation of the National Happiness Index will be stronger in authoritarian regimes and even more so in dictatorships. In fact, such an Index will turn out to be close to useless. To capture the state of development, it is therefore important to use many different social and economic indicators, based on both objective and subjective data. This makes it more difficult for governments to effectively control the indicators. As a consequence, more trust can be put in the overall picture presented by the multitude of indicators.

In democratic countries based on an open society and the rule of law, the idea that government should construct a unique National Happiness Index so as to capture the level and development of wellbeing in society should be firmly resisted. In democracies, the respondents of surveys are induced to answer strategically, and the politicians in power have a strong incentive and considerable possibilities to manipulate the National Happiness Index. Instead of championing the introduction of one Index as the single policy goal, academics and the wider public should support exactly the opposite: many different happiness indices, which are to be in competition with one another. This will enable the individual citizen to compare the different indices and to choose the one, or the ones, that she sees fit. The individual decisions can then be introduced into the political process and the social decision can thus bemade using the constitutionally provided rules. Such an approach allows us to take into account the insights of happiness research and to embed them in a democratic setting.

References

Balassone, Fabrizio, Daniele Franco and Stefania Zotteri (2007). The Reliability of EMU Fiscal Indicators: Risks and Safeguards. *Bancad'Italia Working Paper* 633.

Buti, Marco, João Nogueira Martins and Alessandro Turrini (2007). From Deficits to Debt and Back: Political Incentives under Numerical Fiscal Rules. *CESifo Economic Studies* 53(1):115 - 152.

Dafflon, Bernard and Sergio Rossi (1999). Public accounting fudges towards EMU: A first empirical survey and some public choice considerations. *Public Choice* 101(1-2): 59-84.

Deaton, Angus S. (2011). The financial crisis and the wellbeing of Americans. *Hicks Lecture*. Oxford. May 2011.

Diener, Ed (ed.) (2009). *The Science of Wellbeing – The Collected Works of Ed Diener*. Dordrecht, Heidelberg, London, New York: Springer.

Diener, Ed (2011). The Validity of Life Satisfaction Measures. *Mimeo*. Department of Psychology, University of Illinois and The Gallup Organization.

Diener, Ed and Micaela Y. Chan (2011). Happy People Live Longer: Subjective Wellbeing Contributes to Health and Longevity. *Applied Psychology: Health and Wellbeing* 3(1): 1-43.

European Commission (2010). *Report on Greek Government Deficit and Debt Statistics*. Brussels.

Forte, Francesco (2001). The Maastricht "Excessive Deficit" Rules and Creative Accounting. In Mudambi, Ram, Pietro Navarra and Giuseppe Sobbrio (eds). *Rules and reason: Perspectives on constitutional political economy.* Cambridge: Cambridge University Press.

Frey, Bruno S. (2011a). Subjective Wellbeing, Politics and Political Economy. *Swiss Journal of Economics and Statistics* 147(4): 397-415.

_____. (2011b). Happy People Live Longer. *Science* 331: 542-543.

Frey, Bruno S. and Jana Gallus (forthcoming a). Political Economy of Happiness. *Applied Economics*.

_____ (forthcoming b). Happiness Policy and Economic Development. *International Journal of Happiness and Development*.

Frey, Bruno S. and Alois Stutzer (1999). Measuring Preferences by Subjective Wellbeing. *Journal of Institutional and Theoretical Economics (JITE)* 155(4): 755-778. Tubingen: MohrSiebeck.

_____ (2009). Should Happiness Be Maximized? In Amitava K. Dutt and Benjamin Radcliff (eds). *Happiness, Economics and Politics*. Cheltenham, UK, and Northampton, USA: Elgar: 97-126.

_____ (2012). The use of happiness research for public policy. *Social Choice and Welfare* 38(4): 659-674.

Gregg, Paul (1994). Out of the Count: A Social Scientist's Analysis of the Unemployment Statistics in the UK. *Journal of the Royal Statistical Society, Series A* 157: 253-250.

Huxley, Aldous (1932). *Brave New World*. London: Chatto and Windus.

Koen, Vincent and Paul Joseph Van den Noord (2005). Fiscal Gimmickry in Europe: One-off Measures and Creative Accounting. *OECD Economic Department Working Paper* No. 417.

Milesi-Ferretti, Gian Maria (2004). Good, bad or ugly? On the effects of fiscal rules with creative accounting. *Journal of Public Economics* 88: 377-394.

Sachverständigenrat zur Begutachtung der gesamtwirtschaftlichen Entwicklung (2009). Die Zukunftnicht aufs Spiel setzen. http://www.sachverstaendigenratwirtschaft.de/jahresgutachten-2009-2010.html (Last accessed June 18, 2012).

Schneider, Friedrich (ed.) (2011). *Handbook on the Shadow Economy*. Cheltenham, UK, Northampton, MA, USA: Edward Elgar.

Schneider, Friedrich and Dominik Enste (2002). *The Shadow Economy: Theoretical Approaches, Empirical Studies, and Political Implications*. Cambridge (UK): Cambridge University Press.

Simmons, Joseph P., Leif D. Nelson and Uri Simonsohn (2011). False-Positive Psychology: Undisclosed Flexibility in Data Collection and Analysis Allows Presenting Anything as Significant. *Psychological Science* 22: 1359-1366.

The Economist (2012a). California – Not quite Greek, but still weak. *The Economist*. June16th, 2012.

_____ (2012b). Official statistics – Don't lie to me, Argentina. *The Economist*. Feb.25th, 2012: 12.

Torgler, Benno, Friedrich Schneider and ChristophSchaltegger (2010). Local autonomy, taxmorale, and the shadow economy. *Public Choice* 144(1): 293-321.

Von Hagen, Jürgen and Guntram B. Wolff (2006). What do deficits tell us about debt? Empirical evidence on creative accounting with fiscal rules in the EU. *Discussion Papers* 148,SFB/TR 15 Governance and the Efficiency of Economic Systems, Free University of Berlin,Humboldt University of Berlin, University of Bonn, University of Mannheim, University ofMunich.

Webster, David (2002). Unemployment. How Official Statistics Distort Analysis and Policyand Why. *Radical Statistics* 79/80.

Chapter 6: A Scientific Review of the Remarkable Benefits of Happiness for Successful and Healthy Living

— Ed Diener and Louis Tay

Introduction

Subjective wellbeing, often called "happiness" in layperson terminology, refers to peoples' sense of wellness in their lives – in both thoughts and feelings (Diener, 1984). Subjective well-being includes satisfaction with one's life, marriage, job, and other important domains of life such as health, as well as positive feelings and experiences such as pleasure, enjoyment, contentment, and love. High subjective well-being also includes low levels of fear, anger, and depression. Thus, a person high in well-being experiences satisfaction with their lives, feels pleasant most of the time, and only experiences occasional negative feelings. In sum, the portrait of a happy person is someone who thinks his or her life is going well and experiences feelings that are congruent with this evaluation.

Over the past several decades the science of subjective well-being, or happiness, has been developed and the findings help us understand many of the factors that lead to this positive state. Importantly, we discovered that happiness is more than a measure of individual welfare. It has a generative capability that brings about a host of beneficial effects. When people are happy they are more likely to be productive, creative, helpful, and have good health. Happiness does not merely feel good; it benefits both the person and the society. This discovery makes it imperative that societies monitor happiness, and consider happiness scores when deciding on new policies.

For many years scholars equated happiness with hedonism – where the experience of pleasure is an end in itself. Happiness was thought to be a desirable thing because it felt pleasurable. Research now shows that high levels of subjective well-being go beyond hedonism. This is because the experience of happiness accompanies the fulfillment of needs that are congruent with people's values and goals. For instance, having basic necessities and a sense of freedom are associated with greater happiness (Inglehart et al., 2008), as are environmental factors such as clean air (Luechinger, 2009). Therefore happiness can index valued societal conditions. More importantly, happiness functions as a psychological and societal resource that is beneficial for achieving a wide variety of desirable outcomes, helping citizens to be better friends, neighbors,

employees, and citizens. In light of this, happiness is not synonymous with selfish hedonism, which can work against other values such as good citizenship and altruism. Instead, it is a characteristic that helps people achieve their values. Religion, self-help books, and accumulated wisdom point to the belief that the practice of happiness brings about benefits. Science has now analyzed the specific ways in which happiness generates tangible benefits. The experience of well-being encourages individuals to pursue goals that are resource-building to meet future challenges. In line with this, a sense of wellness helps individuals engage in new goals that promote gains rather than goals that only emphasize preventing losses. At the physiological level negative emotions have been found to hurt immune, cardiovascular, and endocrine functioning. In contrast, positive emotions improve them.

Because high subjective wellbeing is adaptive for both individuals and societies, it is not surprising that most people across the world have a positivity offset – that is, they experience mild levels of happiness above neutral most of the time (Diener and Diener, 1996; Diener, Oishi and Suh, 2012). Despite this inherent "positivity offset" in humans, the tendency to feel mildly positive in both neutral and positive conditions, circumstances in societies can make a large difference to levels of subjective well-being. Some societies produce much higher subjective well-being than others, and thus policy makers and other leaders can play a large role in the happiness of citizens.

In the following sections we review how happiness benefits major life domains.

Subjective well-being aids health and longevity

There are many factors that influence health, such as having strong social support, and practicing good health behaviours such as exercising and not smoking. Although being happy is only one of those factors, it is an important one. This is because higher levels of subjective well-being can directly and indirectly influence health. Many studies demonstrate that happy people experience better health (see reviews by Chida and Steptoe, 2008; Cohen and Pressman, 2006; Diener and Chan, 2011; Howell, Kern and Lyubomirsky, 2007; Lyubomirsky, King and Diener, 2005; Pressman and Cohen, 2005). How does this occur?

Happiness and unhappiness have been directly associated with physiological processes underlying health and disease. For example, Kubzansky and her colleagues (Appleton et al., 2011; Slopen et al., 2012) find that adversity and stress in childhood predict elevated markers of inflammation a few years later. Chronic inflammation that occurs over years can harm the cardiovascular system. Cohen et al. (2003) found that positive emotions were associated with stronger immune system responses to infection. Bhattacharyya et al. (2008)

found that positive feelings were associated with healthier levels of heart rate variability. Negative emotions harm cardiovascular, immune, and endocrine systems in humans, whereas positive emotions appear to help them (e.g., Edwards and Cooper, 1988; Kiecolt-Glaser et al., 2002). Thus, there is a clear path of causation established. Levels of subjective well-being influence health, with positive levels helping health and negative levels harming it. Through an accumulation of studies, we are beginning to understand not just that subjective well-being influences health, but how this occurs. The physiological pathway by which subjective well-being influences health are important for establishing the causal connection going from subjective well-being to health and longevity.

Because subjective wellbeing influences physiological processes underlying health and disease, it is predictive of lower rates of heart disease and lower susceptibility to infection. For example, positive affect is associated with lower rates of strokes in senior citizens (Ostir et al., 2001). Davidson, Mostofsky and Whang (2010) found in a prospective longitudinal study that those without positive feelings were at a higher risk for heart disease than those with some positive feelings, who in turn had higher levels of heart disease than those with moderate positive feelings. Cohen et al. (2003) found that those exposed to cold viruses had more objective cold symptoms if they were low in positive feelings at the outset. Stress can even hinder wound healing after an injury (Christian et al., 2006).

One indirect route from happiness to health is that individuals who are high in subjective well-being are more likely to practice good health behaviors and practices. Blanchflower, Oswald and Stewart-Brown (2012) found that happier individuals have a healthier diet, eating more fruits and vegetables. Ashton and Stepney (1982) reported that neurotic individuals, people who are prone to more stress, are more likely to smoke. Pettay (2008) found that college students high in life satisfaction were more likely to be a healthy weight, exercise, and eat healthy foods. Schneider et al. (2009) found that happier adolescents, as assessed by brain scans of the left prefrontal area, showed a more positive response to moderate exercise. Garg, Wansink and Innman (2007) found that people put in a sad mood as part of the experiment tended to eat tasty but fattening foods such as buttered popcorn rather than healthy fruit.

In a large representative sample of the USA, Strine and her colleagues (2008a; 2008b) found that depressed individuals are more likely to be obese, twice as likely to smoke, and parallel results were found for those very high in anxiety. Lack of exercise was associated with depression, and excessive drinking of alcohol was associated with anxiety. Grant, Wardle and Steptoe (2009) found in a large sample across 21 nations that life satisfaction was associated across regions with a greater likelihood of exercising and a lower likelihood of

smoking. Kubzansky, Gilthorpe and Goodman (2012) found that distressed adolescents are more likely to be overweight. Thus, not only is there a direct biological path from happiness to healthier bodily systems, but unhappiness is associated with destructive behaviours that can exacerbate health problems.

Another indirect effect of happiness, as will be described more fully in the next section, is that higher happiness can lead to more positive and fulfilling social relationships. Having these relationships promotes health (Tay et al., 2012). For instance, the experience of prolonged stress can lead to poor health, but the presence of supportive friends and family can help individuals during this time. In contrast, lonely individuals experience worse health (Cacioppo and Patrick, 2008).

One potential concern with the research findings is that healthier people are happier because of their good health, and not the other way around. While this may be true, scientific studies also show support for a causal link going from happiness to health. Research findings have established a link from happiness to better physiological functioning. Ong (2010) and Steptoe et al. (2009) review various possible explanations for the effects of positive feelings on health. Steptoe, Wardle and Marmot (2005) found among middle-aged men and women that those high in positive feelings had reduced inflammatory, cardiovascular, and neuroendocrine problems. For instance, happiness was associated with a lower ambulatory heart rate and with lower cortisol output across the day. Similarly, Rasmussen, Scheier and Greenhouse (2009) found that optimism predicted future health outcomes such as mortality, immune function, and cancer outcomes, controlling for factors such as demographics, health, and negative feelings. Boehm and her colleagues (Boehm and Kubzansky, 2012; Boehm et al., 2011) found that optimism and positive emotions protect against cardiovascular disease, and also predict slower disease progression. They discovered that those with positive moods were more often engaged in positive health behaviours such as exercising and eating a nutritious diet. Furthermore, positive feelings were associated with beneficial biological markers such as lower blood fat and blood pressure, and a healthier body mass index. These associations held even controlling for level of negative moods.

Another piece of evidence supporting happiness causing health is that positive emotions can undo the ill-effects of negative emotions on health. Negative emotions generate increased cardiovascular activity, and redistribute blood flow to specific skeletal muscles. It has been shown that positive emotions can undo harmful physiological effects by speeding physiological recovery to desirable levels (Fredrickson, 2001; Fredrickson and Levenson, 1998; Fredrickson et al., 2000).

Further, Diener and Chan (2011) reviewed eight types of evidence that point to a causal connection going from subjective well-being to health and longevity. They reviewed longitudinal studies with adults, animal experiments, experiments in which participants' moods are manipulated and biomarkers are assessed, natural quasi-experiments, and studies in which moods and biomarkers are tracked together over time in natural settings. Diener and Chan (2011) concluded that the evidence is "clear and compelling" that positive feelings are causally related to health.

Happiness on average leads not only to health, but to a longer life. Danner, Snowdon and Friesen (2001) found that happier nuns lived about 10 years longer than their less happy colleagues. Because the nuns all had similar diets, housing, and living conditions, and the happiness measure was collected at a very early age many decades before death (at age 22 on average), the study suggests a causal relation between positive moods and mortality. In another study, Pressman and Cohen (2012) found that psychologists who used aroused positive words (e.g., lively, vigorous) in their autobiographies lived longer. In a longitudinal study of individuals 40 years old and older, Wiest et al. (2011) found that both life satisfaction and positive feelings predicted mortality, controlling for SES variables. Conversely, Russ et al. (2012) reviewed ten cohort studies and found that psychological distress predicted all-cause mortality, as well as cardiovascular and cancer deaths. Russ et al. found that even mild levels of psychological distress led to increased risk of mortality, controlling for a number of possible confounding factors. Whereas risk of death from cardiovascular diseases or external causes such as accidents was significant even at lower levels of distress, cancer death was only related to high levels of distress. Bush et al. (2001) found that even mild depression increased the risk of mortality after people had experienced a heart attack.

A systematic review by Chida and Steptoe (2008) on happiness and future mortality in longitudinal studies showed that happiness lowered the risk of mortality in both healthy and diseased populations, even when initial health and other factors were controlled. Moreover, the experience of positive emotions predicted mortality over and above negative emotions, showing that the effects of subjective well-being go beyond the absence of negativity. Therefore not only do negative emotions predict mortality, but positive emotions predict longevity. One reason this may be so, besides the toll that cardiovascular and immune diseases take on unhappy people, is that stress might lead to more rapid aging. Epel et al. (2004) found shorter telomeres (the endcaps protecting DNA) in women who had significant stress in their lives. Because DNA must replicate with fidelity for an individual to remain healthy over the decades of life, and because the telomeres protect our DNA during

replication, the reduction of telomeres due to stress leads to more rapid aging when a person chronically experiences unhappiness.

Even in animals happiness can affect longevity. Weiss, Adam and King (2011) found that orang-utans who were rated as happier by their caretakers lived longer. Indeed, the difference between the apes that were one standard-deviation above versus below the mean in happiness was 11 years. Because these animals often live about 50 years in captivity, happiness accounted for a very large increase in longevity.

The positive benefits of subjective well-being on health at the individual level generalize to the societal level as well. Lawless and Lucas (2011) found that places with higher life satisfaction had greater life expectancies, with lower levels of mortality from heart disease, homicide, liver disease, diabetes, and cancer. Similarly, Blanchflower and Oswald (2008) found that higher levels of national well-being were related to lower levels of national hypertension in a sample of 16 nations. Blanchflower and Oswald (2009) also found that regions in the United Kingdom reporting more stress also had higher rates of blood pressure. Moum (1996) found that low subjective well-being is both a short- and long-term predictor of suicide, and Koivumaa-Honkanen et al. (2001) uncovered similar findings in a 20-year study. Across 32 nations it was found that experiencing higher life satisfaction and happiness was related to lower suicide rates (Bray and Gunnell, 2006). These findings suggest that happiness can influence health outcomes for both individual citizens and entire societies.

Subjective wellbeing improves social relationships

Having supportive relationships boosts subjective well-being, but having high subjective well-being in turn leads to better social relationships (Lyubomirsky, King and Diener, 2005; Myers, 2000). Thus, good relationships both cause happiness and are caused by it. Two major reasons why happiness benefits social relationships are because happiness increases a person's level of sociability and also improves the quality of social interactions. Happier people have a larger quantity and better quality of friendships and family relationships (Diener and Seligman, 2002).

Frequent positive emotions create a tendency in people to be more sociable. In a laboratory experiment people placed in a positive mood expressed greater interest in social and prosocial activities compared to those in a neutral condition, whereas those placed in a negative mood indicated lower interest in social activities (Cunningham, 1988b). This pattern was replicated in a second study that found an interest in social and prosocial activities among those in a good mood. People who were placed in a good mood expected social activities to be more rewarding than those not placed in a good mood. Similarly, other

experimental studies have demonstrated that inducing happiness, in contrast to sadness, makes people more likely to express liking for others they meet for the first time (Baron, 1987; 1990). On the other hand, the absence of positive feelings is accompanied by feeling bored, unsociable, uninterested in things, and slowed down and unenergetic (Watson et al., 1995), reflecting a lack of active involvement with the environment and other people. It has also been shown that depressed individuals cause others to react in a negative manner (Coyne, 1976). This can lead to unwillingness to have future interactions with those who have low happiness.

In our laboratory a group of college students was studied for a period of six weeks, during which time they were signalled at random moments each day. When signalled, the respondents reported on their feelings and tendencies. Reported happiness at the moment was associated with feeling sociable, caring and in harmony with others, energetic, interested, and optimistic. For example, people very high in happiness at the moment were 13 times more likely to say they felt sociable rather than wanting to be alone. In contrast, those low in momentary happiness were twice as likely to want to be alone. Those who were very happy at the moment were 30 times more likely than those low in happiness to be interested in what they were doing, as opposed to bored, which was the strongest feeling in those low in momentary happy mood. Another study demonstrated that happier individuals have more social interactions and spend more time in social activities than less happy individuals (Berry and Hansen, 1996).

The associations between positive moods and sociability are not just in terms of *feeling* sociable, but are carried out in behaviour. Cunningham (1988a) discovered that people in an induced positive mood condition compared to a negative mood condition were more talkative. Mehl et al. (2010) monitored people's everyday conversations for four days, and assessed happiness through both self-reports and informant reports. They found that happy participants spent about 25% less time alone and about 70% more time talking when they were with others. Furthermore, the happy participants engaged in less small talk and more substantive conversations compared to their unhappy peers.

Recent evidence shows the happiness-relationship link occurs across cultures. Lucas et al. (2000) found that across the world positive feelings were associated with tendencies for affiliation, dominance, venturesomeness, and social interaction. Similarly, a world survey of 123 nations found that the experience of positive feelings was strongly related to good social relationships across different socio-cultural regions (Tay and Diener, 2011).

Happy people are not just more sociable; they also experience higher-quality social relationships. Kazdin, Esveldt-Dawson and Matson (1982) found that children put in a positive mood showed greater social skills and confidence in social behaviour than those not put in a good mood. Boehm and Lyubomirsky (2008) reviewed evidence showing that happy people tend to be more popular and likable. One study showed that reports of better interaction quality were not merely a function of the happy person's perceptions, but that observers similarly rated happier individuals as having better interactions with strangers (Berry and Hansen, 1996).

Happiness can also have effects on the long-term quality of relationships. Luhmann et al. (2013) found that unmarried people high in life satisfaction are more likely to get married in the following years, and less likely to get separated or divorced if they get married. Conversely, Stutzer and Frey (2006) found low life satisfaction prior to courtship predicted later dissolution of the marriage.

In sum, there is substantial evidence connecting positive moods to higher sociability and better quality of social relationships. Happier people enjoy the company of others, and find that interacting with people is more rewarding compared to less happy individuals. Others in turn enjoy interacting with happy individuals. Those high in subjective well-being thus have more rewarding and stable social relationships.

Happiness can generate positive snowball effects for the society. Research has shown that people who are happier are likely to bring happiness to those around them, resulting in networks of happier individuals. Happiness extends up to three degrees of separation and longitudinal models show that individuals who are surrounded by happy people are likely to become happier in the future (Fowler and Christakis, 2008).

Subjective wellbeing increases workplace success

The experience of happiness is beneficial to workplace success because it promotes workplace productivity, creativity, and cooperation. There are several reasons why this is the case. The experience of positive feelings motivates people to succeed at work, and to persist at their goals as well. As we have shown, individuals who are happier are more likely to be healthy and so take fewer unnecessary sick days and are more productive. In addition, individuals who are happier integrate information leading to new ideas, which leads to creativity and innovation. Finally, individuals who are happier tend to have better social relations. In the context of work this leads to greater cooperation, trust, and the loyalty of coworkers and customers.

Happy individuals are motivated to pursue long-term goals despite short-term costs (Aspinwall, 1998). Fry (1975) found that children placed in a happy mood better resisted temptation. Lerner et al. (in press) found that induced sadness made adults less willing to make present sacrifices for future gains. Unhappy individuals were less likely to exhibit what psychologists call "delay of gratification." Indeed, sad subjects in the experiment were on average more willing to accept five dollars in pay at the moment rather than receive 100 dollars in a year. Such a pattern suggests that unhappy individuals might have difficulty saving for the future, or foregoing current rewards for future greater gains. Moreover, happy individuals are more likely to focus on external challenges rather than on themselves (Green et al., 2003). They more often pursue what psychologists call "promotion goals" (attaining new things), rather than prevention goals (avoiding possible bad things) (Lyubomirsky, King and Diener, 2005). In addition, positive emotions help people to focus their attention broadly, and thus see new connections between information, and engage in novel activities (Fredrickson, 2001).

Oswald, Proto and Sgroi (2012) investigated how positive feelings influence productivity. In an experiment involving piece-rate pay for research participants across a number of days, the economists found that those who were put in a positive mood had a greater quantity of work output, but no less quality of output. Those performing the task at low and medium levels were helped most by being put in a good mood. In a second study, Oswald et al. found that a bad mood induced by family illness or bereavement had a detrimental impact on productivity.

Employees who are high in subjective well-being are more likely to achieve more while at work. Peterson et al. (2011) found that happy workers – optimistic and hopeful, resilient and high in self-efficacy – were more likely to be high in supervisor-rated performance and in financial performance. Conversely, whereas positive feelings reduce absenteeism from work, negative feelings increase absenteeism as well as turnover (Pelled and Xin, 1999).

In an ever-increasing competitive business environment where innovation is a key driver of success, it is noteworthy that happiness has been shown to enhance curiosity and creativity. Foremost, positive feelings are associated with curiosity and creativity (Ashby, Valentin and Turken, 2002; Jovanovic and Brdaric, 2012). Further, there is a large experimental research literature showing that people put in a good mood tend to be more original, creative, and show greater cognitive flexibility (e.g., Isen, Daubman and Nowicki, 1987). Both Amabile et al (2005) and George and Zhou (2007) found that workers are more creative when they experience positive moods. Indeed, two recent meta-analyses of experimental and non-experimental studies showed that although

the strength of effects depend on the context and motivational focus, happiness is related to and generates creativity (Baas, Dreu and Nijstad, 2008; Davis, 2009).

A major reason for the success of happy individuals and organizations is that they experience on average more positive social relationships. Research clearly shows that happy workers are more cooperative and collaborative in negotiations than unhappy ones. In general, positive emotions boost cooperative and collaborative behaviour in negotiations rather than withdrawal or competition (e.g., Baron, Fortin et al., 1990; Barsade, 2002; Carnevale, 2008; Forgas, 1998). People put in a positive mood are more willing to make more concessions during negotiations (Baron, 1990; Baron, Rea and Daniels, 1992). Through cooperation, they reach a better joint solution in negotiations (Carnevale and Isen, 1986). Also, people put in a positive mood are more likely to make cooperative choices in a prisoner's dilemma game (Lawler, Thye and Yoon, 2000) and are more likely to show cohesion with their group. Recent experimental studies have shown positive emotions leads to trust and cooperation when specific conditions are met (Hertel et al., 2000; Lount, 2010). Overall, happiness leads to cooperation and collaboration in the workplace, particularly for negotiations.

One indicator of worker subjective well-being is job satisfaction (Judge and Kinger, 2007). A quantitative review found that job satisfaction is a key predictor of job performance, showing that happy employees are better performers in their workplace (Judge et al., 2001). To establish the causal relation, a meta-analysis of panel data demonstrated that job satisfaction predicted future performance but performance did not predict future job satisfaction (Riketta, 2008).

Erdogan et al. (2012) reviewed the research showing that individuals with higher life satisfaction are more likely to have higher levels of career satisfaction, lower turnover intentions, and higher organizational commitment. In line with the notion that happier workers are better workers, higher well-being is associated with higher income (Judge et al., 2010) and future income (Diener, Nickerson et al., 2002; Graham, Eggers and Sandip, 2004; Marks and Fleming, 1999). DeNeve and Oswald (in press) used siblings as comparison control participants, and also controlled factors such as intelligence and health, and found that both positive feelings and life satisfaction predicted higher income in the future. Thus, four longitudinal studies have found that happiness at one point in time predicts higher future income, controlling other relevant factors such as intelligence and parental income.

Subjective wellbeing brings about greater success at the organizational level as well. Bockerman and Ilmakunnas (2012) found that job satisfaction predicts the

productivity of manufacturing plants. Harter et al. (2010) found in a longitudinal study of ten large organizations that worker engagement makes a difference to productivity. Work units in which employees were satisfied and otherwise felt highly engaged with their work led to improvements in the bottom-line indexed by revenue, sales, and profit. On the other hand, reverse causality going from company success to employee satisfaction was weaker. Similarly, Edmans (2011; 2012) found evidence consistent with the importance of employee satisfaction for firm performance. An analysis of the "100 Best Companies to Work For in America" revealed that they increased more in equity value compared to the industry benchmarks. The resulting higher returns were about 3 percent per year.

The study by Harter and his colleagues based on 2,178 work units in ten large companies found that engaged and satisfied workers led to a greater revenue, sales, and profits. The two factors that mediated the relation between employee engagement and the bottom-line outcomes were customer loyalty and employee retention. It is understandable that customers would prefer to interact with positive employees and thus frequent the business. Employee retention is a large challenge for modern companies both because it is expensive to replace employees, especially highly skilled ones, and because more senior employees have more experience on the job. Thus, it is not surprising that employee engagement, resulting in customer loyalty and employee retention, accounted for ten percent of the variability in the productivity of the corporations, a huge effect in today's competitive business environment.

Finally, happy workers help keep costs down because they are healthier, as reviewed earlier. They take fewer sick days and thus the organization requires fewer employees for the same volume of work. Because of better health, happy workers can help reduce the healthcare costs of their organizations. Because healthcare is becoming a major expense for organizations and nations, the better health of happy workers is a significant asset.

Happiness contributes to prosocial citizenship

Research studies indicate a link between high subjective well-being and being a better friend, neighbour, and citizen. The link also extends to the work situation. Good citizenship in the workplace is consistently related to job satisfaction (Ilies, Scott and Judge, 2006; Lee and Allen, 2002; Organ and Ryan, 1995). Organizational citizenship includes activities such as helping others on the job, even when it is not part of one's job description. Furthermore, the "good citizen" at work is conscientious beyond the minimal requirements of the job, and does not perform counterproductive behaviours such as stealing from the workplace. Higher levels of subjective well-being at work lead individuals to engage in behaviours that go beyond their job such as voluntarily helping

others at work (Spector and Fox, 2002). Diary studies show that greater levels of job satisfaction predict lower workplace deviance (behaviours such as stealing, taking excessive breaks, intentionally working slowly, and spreading rumours about colleagues) (Judge, Scott and Ilies, 2006), whereas unhappiness at work predicts higher deviance (Yang and Diefendorff, 2009).

People who are in a positive mood see others more inclusively and sympathetically. For example, they are less biased against other ethnic groups (Johnson and Fredrickson, 2005). Nelson (2009) found that people in a positive mood induction condition compared to neutral and negative mood conditions showed greater compassion, perspective taking, and sympathy for a person experiencing distress.

Individuals high in subjective well-being give more to their communities—in both time and money. Morrison, Tay and Diener (2012) found that both life satisfaction and positive feelings predicted reports of donating money to charity, helping a stranger, and volunteering activities. Oishi, Diener and Lucas (2007) found that happier people volunteer more. Aknin et al. (2010) found in a study of 136 countries that prosocial uses of money by happy people generalized across regions of the world. Priller and Shupp (2011) found slightly higher rates of blood donation, and well as monetary giving to charity, among happier individuals. They also found that those who were satisfied with their incomes were more likely to donate money to worthy causes.

Do happy moods cause the helping behaviour and good citizenship? It is a consistent finding in social psychology experiments that when people are induced into a good mood, by various means, they are more likely to help others (e.g., Carlson, Charlin and Miller, 1988). These experimental studies in which people who are put into a good mood and compared to those in a neutral mood leave little doubt that happier feelings generally tend to increase helping. The fact that people give both more time and money when they are put into a positive mood in an experiment (see Anik et al., 2009) indicates that being happy causes the prosocial actions. Aknin, Dunn and Norton (2012) suggest that the relation between mood and helping is circular. When people are in a good mood they tend to help others; helping others in turn fosters a good mood. Thus, friends, family, neighbours, and the society as a whole tends to profit from happy people because these individuals are more likely to be helpful to others.

The lack of happiness can be extremely detrimental to effective functioning

There is now substantial evidence that depression interferes with good health. For example, depressed people are substantially more likely to have

cardiovascular problems such as heart disease and strokes. Rugulies (2000) found in a review of 11 studies that depressed feelings predict coronary heart disease, and that clinical levels of depression predict even more strongly. Similarly, when a person is angry and hostile they are more likely to suffer from coronary heart disease (Smith et al., 2004). Depression is associated with unhealthy physiological processes such as inflammation (Dinan, 2009), which is believed to be connected to the development of heart disease. Antidepressant medications can lower inflammation.

A review by Zorrilla et al. (2001) found that stress is related to a weaker immune system. The case of fertility show how detrimental negative emotions can be to healthy functioning. When couples are trying to have a baby they have a harder time achieving this goal if the woman is depressed (Gotz, Martin and Volker, 2008; Neggers et al., 2006; Wisner et al., 2009). If the unhappy woman does succeed in becoming pregnant, she is more likely to have a premature and low birth weight child (Field, Diego and Hernandez-Reif, 2006; Field et al., 2009; Orr and Miller, 1995; Williamson et al., 2008), both of which are strong risk factors for infant death or an abnormal child.

Depression, which as we noted is characterized by low or absent positive feelings, creates problems in social relationships such as divorce, limited social support, and distancing from one's neighbours (Gotlib and Hammen, 2002). Even minor depression results in problems in social relations, for example higher rates of divorce (Beck and Koenig, 1996). Even those recovering from depression show impairments in the social and occupational domains (Romera et al., 2010). In addition, clinical depression interferes with executive functioning, which is a hallmark of human's special adaptive abilities. For example, Fossati, Ergis and Allilaire (2002) review evidence indicating that depressed individuals suffer deficits in problem solving and planning. Snyder (2012) reviewed extensive evidence showing that depressed people suffer substantially from broad impairments in executive functions such as planning, with strong effect sizes varying from .32 to .97.

Negative emotions in the workplace, especially chronic or intense ones, can be very detrimental to the organization. For example, Felps, Mitchell and Byington (2006) found that a single negative individual in a work unit often brings down the morale and functioning of the entire group.

Kessler (2012) thoroughly reviewed the negative outcomes that results when people suffer from anhedonia, the lack of positive feelings or subjective well-being, as found in the psychiatric illness of depression:

1. A high rate of school dropout

2. A lower probability of marrying, but a higher probability of divorcing if the person does marry. In addition, there is a greater probability of being both a perpetrator and a victim of marital violence. The children of depressed parents also experience greater difficulties.
3. In the workplace a greater probability of being unemployed, of absenteeism from work, and of earning a lower income.
4. Worse health and a higher rate of mortality. The depressed are more likely to have arthritis, asthma, cardiovascular disease, diabetes, and chronic pain.

The devastating problems that arise when people lack positive feelings reveal how very necessary subjective well-being is for functioning well in life.

Happiness is not magic or a cure-all

Although happy people and societies have a number of advantages, this does imply that high subjective well-being is a panacea that will prevent all problems and make everything fine. Societies must have other ingredients such as an educated workforce, people with integrity and honesty, employees who are motivated to work, and so forth in order to build a society with high quality of life. Happiness is helpful but not sufficient in itself. Similarly, factors such as education are helpful for success, but they are not sufficient by themselves. In order to succeed and have a high quality of life, nations need motivated workers who are honest and care about the society. It is beneficial if citizens are also happy.

In terms of health, happiness is like other factors that can facilitate good health. It helps health, but is not a guarantee of it. Happy people die at a young age in some cases. However, on average they will live longer. A few people who smoke live a very long time and some people who do not smoke die at a very early age, but on average people who do not smoke live substantially longer. Similarly, people who are happy on average live longer, despite the fact that there are exceptions. We can make statements about the effects of average happiness (economists use the label *ceteris paribus* to refer to other things being equal) because in particular cases there can be other factors that override the influence of subjective well-being.

Not every study has found positive benefits for long-term happiness. A few studies find no differences between happier and less happy individuals, and the rare study has shown opposite effects. This is common in research because of sampling, methodology, and other differences between studies. Nonetheless, reviews that summarize results across studies have virtually always shown benefits for high subjective well-being. One reason for the few null findings is that happiness will not show its value in all samples and contexts. For instance,

for young adults there might be no differences in health or longevity due to happiness because young adults very rarely die and mostly have healthy bodies. The results of happiness and unhappiness become more manifest as adults age. Similarly, one would not be surprised if happiness did not reduce divorce in a nation where divorce is virtually nonexistent.

Another caution about the conclusion that happiness is desirable is that people do not need to be constantly euphoric or ecstatic. Happy people most of the time feel merely pleasant – a mild positive state. Only occasionally do happy people feel intensely positive. Oishi, Diener and Lucas (2007) found that although the happiest individuals did very well in social relationships, the modestly happy – not 100 percent satisfied – often did the best in achievement domains. Similarly, there is evidence that frequent high-arousal emotions could be harmful to health (Pressman and Cohen, 2005). Thus, extremely high happiness is not absolutely necessary to effective functioning and sometimes moderate happiness can be most helpful.

An important fact to remember is that happy people occasionally do feel unhappy, and this is not necessarily undesirable. For instance, a person should feel sad at her mother's funeral, and some fear can help a person avoid dangerous situations. Gruber, Mauss and Tamir (2011) and Forgas (2007), as well as others, have shown that in some situations negative emotions can help people to respond more effectively. Thus, happiness does not mean that the person experiences no negative feelings whatsoever. The happy person, however, does not feel *chronic* negative feelings; he or she experiences negative feelings only occasionally, not frequently, and in appropriate situations. Similarly, when we measure the subjective well-being of a society, high life satisfaction is desirable, but it need not be complete satisfaction because people might have one or two mildly dissatisfying areas that they desire to improve.

Throughout this report we have treated life satisfaction and positive feelings together. Although they are related, researchers find that they are distinct and have some different causes and consequences. Nonetheless, for reasons of simplicity we treated them together in this report. Another reason for combining them is that research into the differences in the two types of subjective well-being is still a relatively underdeveloped area. Nonetheless, the two should be assessed separately when monitoring the subjective well-being of nations.

In summary, happy people function better, but this does not require perfect happiness. Individuals who experience positive feelings most of the time, who feel very satisfied with life but not perfectly satisfied, and who occasionally feel some negative emotions can function well. What is undesirable is to have many

citizens who are dissatisfied with life, who rarely feel positive, and who feel negative much of the time.

Conclusion

Some have argued that measures of economic development are all we need to assess the progress of societies. Although economic progress can be desirable, it can produce some negative outcomes, such as environmental pollution, a reduction in social capital, inequality, and higher rates of major depression (Kessler, 2012). Thus, it is important to balance economic measures with measures of subjective well-being, to insure that economic progress leads to broad improvements across life domains, not just higher incomes. By assessing subjective well-being as well as economic variables, the society can gauge whether overall net progress is positive. Given the benefits to individuals and societies of high subjective well-being, it is surprising that measures of happiness have not thus far been in greater use. We outline in detail the case for national accounts of well-being in Diener et al. (2009).

Existing scientific evidence indicates that happiness causes benefits and does not simply follow from them. Experimental research in which moods and emotions are induced in some participants and their actions are compared to a control group show that positive moods lead to creativity, sociability, altruism, and beneficial physiological patterns. Levels of subjective well-being are found to predict future health, mortality, social success, business productivity, and income, controlling statistically for other possible causes. For example, young people who are less happy many years before they meet their future spouse later show higher rates of divorce compared to their happier peers. Furthermore, predictions in the other direction, from conditions to subjective well-being (that is, conditions influencing happiness), are sometimes weaker.

We now have initial evidence about the processes that mediate between happiness and the beneficial outcomes. For instance, happiness produces greater cooperation, energy, motivation, and creativity, which in turn are instrumental to business success. Conversely, depression creates problems such as illness, quitting one's job more frequently, and alcohol abuse that all lead to less success in the workplace. Similarly, positive feelings are associated with a stronger immune system and fewer cardiovascular problems, whereas anxiety and depression are associated with poorer health behaviors and problematical physiological indicators such as inflammation. Thus, the causal role of happiness on health and longevity can be understood with the mediating mechanisms that are now being uncovered.

Given the many benefits of happiness it seems risky to argue that we need yet more data before beginning to monitor the subjective well-being of nations. This

paper has shown that happy people function better, and therefore a happy society will also tend to be a healthier and more productive one. Furthermore, people high in subjective well-being tend to have better social relationships and perform more prosocial actions. In addition, people want high subjective well-being – they desire to be satisfied with life and enjoy it. Thus, true progress in a society demands attention both to the economy and to the subjective well-being of citizens.

Further reading

Biswas-Diener, R., Diener, E. and Tamir, M., 2004. The psychology of subjective well-being. *Daedalus*, 133, 18-25.

Diener, E. and Biswas-Diener, R., 2008. *Happiness: unlocking the mysteries of psychological wealth.* Malden, MA: Wiley/Blackwell.

Diener, E. and Seligman, M. E. P., 2004. Beyond money: toward an economy of well-being. *Psychological Science in the Public Interest*, 5, 1-31.

Diener, E., 1984. Subjective well-being. *Psychological Bulletin*, 95, 542-575.

_____ 2000. Subjective well-being: The science of happiness, and a proposal for a national index. *American Psychologist*, 55, 34-43.

Diener, E., Lucas, R., Schimmack, U. and Helliwell, J., 2009. *Well-being for public policy.* New York: Oxford University Press.

Diener, E., Suh, E. M., Lucas, R. E. and Smith, H. L., 1999. Subjective well-being: three decades of progress. *Psychological Bulletin*, 125, 276-302.

References

Aknin, L. B., Barrington-Leigh, C. P., Dunn, E. W., Helliwell, J. F., Biswas-Diener, R., Kemeza, I., Nyende, P., Ashton-James, C. E. and Norton, M. I., 2010. Prosocial spending and well-being: Cross-cultural evidence for a psychological universal. *NBER Working Paper,* No. 16415.

Aknin, L. B., Dunn, E. W. and Norton, M. I., 2012. Happiness runs in a circular motion: Evidence for a positive feedback loop between prosocial spending and happiness. *Journal of Happiness Studies*, 13, 347-355.

Amabile, T. M., Barsade, S. G., Mueller, J. S. and Staw, B., 2005. Affect and creativity at work. *Administrative Science Quarterly*, 50, 367-403.

Anik, L., Aknin, L. B., Norton, M. I. and Dunn, E. W., 2009. Feeling good about giving: The benefits (and costs) of self-interested charitable behavior. *Harvard Business School Marketing Unit Working Paper* No. 10-012. (URL=http://ssrn.com/abstract=1444831 or http://dx.doi.org/10.2139/ssrn.1444831).

Appleton, A. A. Buka, S. L., McCormick, M. C., Koenen, K. C., Loucks, E. B., Gilman, S. E. and Kubzansky, L. D., 2011. Emotional functioning at age 7 years is associated with C-reactive protein in middle adulthood. *Psychosomatic Medicine,* 73, 295-303.

Ashby, F. G., Valentin, V. V. and Turken, U., 2002. The effects of positive affect and arousal on working memory and executive attention. In: S. Moore and M. Oaksford, eds. *Emotional cognition: From brain to behaviour.* Amsterdam: John Benjamins. 245-287.

Ashton, H. and Stepney, R., 1982. *Smoking: psychology and pharmacology*. London: Tavistock Publications.

Aspinwall, L. G., 1998. Rethinking the role of positive affect in self-regulation. *Motivation and Emotion,* 22, 1-32.

Baas, M., De Dreu, C. K. W. and Nijstad, B. A., 2008. A meta-analysis of 25 years of mood-creativity research: Hedonic tone, activation, or regulatory focus? *Psychological Bulletin,* 134, 779-806.

Baron, R. A., 1987. Interviewer's moods and reactions to job applicants: The influence of affective states on applied social judgments. *Journal of Applied Social Psychology,* 17, 911-926.

_____ 1990. Environmentally induced positive affect: its impact on self-efficacy, task performance, negotiation, and conflict. *Journal of Applied Social Psychology,* 20, 368-384.

Baron, R. A., Fortin, S. P., Frei, R. L., Hauver, L. A. and Shack, M. L., 1990. Reducing organizational conflict: the role of socially-induced positive affect. The International Journal of Conflict Management, 1, 133-152

Baron, R. A., Rea, M. S. and Daniels, S. G., 1992. Effects of indoor lighting (illuminance and spectral distribution) on the performance of cognitive

tasks and interpersonal behaviors: The potential mediating role of positive affect. *Motivation and Emotion,* 16, 1-33.

Barsade, S., 2002. The ripple effect: emotional contagion and its influence on group behavior. *Administrative Science Quarterly,* 47, 644-675.

Beck, D. A. and Koenig, H. G., 1996. Minor depression: a review of the literature. *International Journal of Psychiatry in Medicine,* 26, 177-209.

Berry, D. S. and Hansen, J. S., 1996. Positive affect, negative affect, and social interaction. *Journal of Personality and Social Psychology,* 71, 796-809.

Bhattacharyya, M. R., Whitehead, D. L., Rakhit, R. and Steptoe, A., 2008. Depressed mood, positive affect, and heart rate variability in patients with suspected coronary artery disease. *Psychosomatic Medicine,* 70, 1020-1027.

Blanchflower, D. G. and Oswald, A. J., 2008. Hypertension and happiness across nations. *Journal of Health Economics,* 27, 218-233.

_____ 2009. Hypertension and happiness across regions. Paper submitted for publication, University of Warwick.

Blanchflower, D. G., Oswald, A. J. and Stewart-Brown, S., 2012. Is psychological well-being linked to the consumption of fruit and vegetables? *Social Indicators Research*, in press.

Bockerman, P. and Ilmakunnas, P., 2012. The job-satisfaction-productivity nexus: A study using matched survey and register data. *Industrial & Labor Relations Review*, 65, 244-262.

Boehm, J. K. and Kubzansky, L. D., 2012. The heart's content: the association between positive psychological well-being and cardiovascular health. *Psychological Bulletin,* 138, 655-691.

Boehm, J. K. and Lyubomirsky, S., 2008. Does happiness lead to career success? *Journal of Career Assessment*, 16, 101-116.

Boehm, J. K., Peterson, C., Kivimaki, M. and Kubzansky, L., 2011. A prospective study of positive psychological well-being and coronary heart disease. *Health Psychology,* 30, 259-267.

Bray, I. and Gunnell, D., 2006. Suicide rates, life satisfaction and happiness as markers for population mental health. *Social Psychiatry and Psychiatric Epidemiology,* 41, 333-337.

Bush, D. E., Ziegelstein, R. C., Tayvack, M., Richter, D., Zahalsky, H. and Fauerbach, J. A., 2001. Even minimal symptoms of depression increase mortality risk after acute myocardial infarction. *American Journal of Psychiatry*, 15, 337-341.

Cacioppo, J. T. and Patrick, W., 2008. *Loneliness: human nature and the need for social connection*. New York: W. W. Norton.

Carlson, M., Charlin, V. and Miller, N., 1988. Positive mood and helping behavior: a test of six hypotheses. *Journal of Personality and Social Psychology,* 55, 211-229.

Carnevale, P. J. D. and Isen, A.M., 1986. The influence of positive affect and visual access on the discovery of integrative solutions in bilateral negotiations. *Organizational Behavior and Human Decision Processes,* 37, 1-13.

Carnevale, P. J., 2008. Positive effect and decision frame in negotiation. *Group Decision and Negotiation,* 17, 51-63.

Chida, Y. and Steptoe, A., 2008. Positive psychological well-being and mortality: a quantitative review of prospective observational studies. *Psychosomatic Medicine,* 70, 741-756.

Christian, L. M., Graham, J. E., Padgett, D. A., Glaser, R. and Kiecolt-Glaser, J. K., 2006. Stress and wound healing. *Neuroimmunomodulation,* 13, 337-346.

Cohen, S. and Pressman, S. D., 2006. Positive affect and health. *Current Directions in Psychological Science,* 15, 122-125.

Cohen, S., Doyle, W. J., Turner, R. B., Alper, C. M. and Skoner, D. P., 2003. Emotional style and susceptibility to the common cold. *Psychosomatic Medicine,* 65, 652-657.

Coyne, J. C., 1976. Depression and the response of others. *Journal of Abnormal Psychology,* 85, 186-193.

Cunningham, M. R., 1988a. Does happiness mean friendliness? Induced mood and heterosexual self-disclosure. *Personality and Social Psychology Bulletin,* 14, 283-297.

_____ 1988b. What do you do when you're happy or blue? Mood, expectancies, and behavioral interest. *Motivation and Emotion,* 12, 309-330.

Danner, D. D., Snowdon, D. A. and Friesen, W. V., 2001. Positive emotions in early life and longevity: Findings from the nun study. *Journal of Personality and Social Psychology,* 80, 804-813.

Davidson, K. W., Mostofsky, E. and Whang, W., 2010. Don't worry, be happy: positive affect and reduced 10-year incident coronary heart disease: The Canadian Nova Scotia Health Survey. *European Heart Journal*, 31, 1065-1070.

Davis, M. A., 2009. Understanding the relationship between mood and creativity: a meta-analysis. *Organizational Behavior and Human Performance,* 108, 25-38.

DeNeve, J. E. and Oswald, A. J., (in press). Estimating the influence of life satisfaction and positive affect on later income using sibling fixed effects. *PNAS*: Proceedings of the National Academy of Sciences.

Diener, E. and Chan, M., 2011. Happy people live longer: subjective well-being contributes to health and longevity. *Applied Psychology: Health and Well-being,* 3, 1-43.

Diener, E. and Diener, C., 1996. Most people are happy. *Psychological Science*, 7, 181-185.

Diener, E. and Seligman, M. E. P., 2002. Very happy people. *Psychological Science*, 13, 81-84.

Diener, E., Lucas, R., Schimmack, U. and Helliwell, J., 2009. *Well-being for public policy.* New York: Oxford University Press.

Diener, E., Nickerson, C., Lucas, R. E. and Sandvik, E., 2002. Dispositional affect and job outcomes. *Social Indicators Research,* 59, 229-259.

Diener, E., Oishi, S. and Suh, E., 2012. Positive emotion offset was essential to human evolutionary success. Paper submitted for publication, University of Illinois.

Dinan, T. G., 2009. Inflammatory markers in depression. *Current Opinion in Psychiatry*, 22, 32-36.

Edmans, A., 2011. Does the stock market fully value intangibles? Employee satisfaction and equity prices. *Journal of Financial Economics,* 101, 621-640.

_____ 2012. The link between job satisfaction and firm value, with implications for corporate social responsibility. *Academy of Management Perspectives*, in press.

Edwards, J. R. and Cooper, C. L., 1988. The impacts of positive psychological states on physical health: a review and theoretical framework. *Social Science and Medicine*, 12, 1447-1459.

Epel, E. S., Blackburn, E. H., Lin, J., Dhabhar, F. S., Adler, N. E., Morrow, J. D. and Cawthon, R. M., 2004. Accelerated telomere shortening in response to life stress. *Proceedings of the National Academy of Sciences of the United States of America,* 101(49), 17312-17315.

Erdogan, B., Bauer, T. N., Truxillo, D. M. and Mansfield, L. R., 2012. Whistle while you work: a review of the life satisfaction literature. *Journal of Management,* 38, 1038-1083.

Felps, W., Mitchell, T. R. and Byington, E., 2006. How, when, and why bad apples spoil the barrel: Negative group members and dysfunctional groups. *Research in Organizational Behavior: An Annual Review Series of Analytic Essays and Critical Reviews*, 27, 175-222.

Field, T., Diego, M. and Hernandez-Reif, M., 2006. Prenatal depression effects on the future of the newborn: A review. *Infant Behavior and Development,* 29, 445-455.

Field, T., Diego, M., Hernandez-Reif, M., Deeds, O., Holder, V., Schanberg, S. and Kuhn, C., 2009. Depressed pregnant black women have a greater incidence of prematurity and low birthweight outcomes. *Infant Behavior and Development,* 32, 10-16.

Forgas, J. P., 1998. On feeling good and getting your way: mood effects on negotiator cognition and bargaining strategies. *Journal of Personality and Social Psychology*, 74, 565-577.

_____ 2007. When sad is better than happy: negative affect can improve the quality and effectiveness of persuasive messages and social influence. *Journal of Experimental Social Psychology*, 43, 513-528.

Fossati, P. Ergis, A. M. and Allilaire, J. F., 2002. Executivie functioning in unipolar depression: A review. *L'Encephale,* 28, 97-107.

Fowler, J. H. and Christakis, N. A., 2008. Dynamic spread of happiness in a large social network: Longitudinal analysis over 20 years in the Framingham Heart Study. *British Medical Journal,* 337, a2338.

Fredrickson, B. L. and Levenson, R. W., 1998. Positive emotions speed recovery from the cardiovascular sequelae of negative emotions. *Cognition and Emotion,* 12, 191-220.

Fredrickson, B. L., 2001. The role of positive emotions in positive psychology: the broaden-and-build theory of positive emotions. *American Psychologist,* 56, 218-226.

Fredrickson, B. L., Mancuso, R. A., Branigan, C. and Tugade, M. M., 2000. The undoing effect of positive emotions. *Motivation and Emotion,* 24, 237-258.

Fry, P. S., 1975. Affect and resistance to temptation. *Developmental Psychology,* 11, 466-472.

Garg, N., Wansink, B. and Inman, J. J., 2007. The influence of incidental affect on consumers' food intake. *Journal of Marketing*, 71, 194-206.

George, J. M. and Zhou, J., 2007. Dual tuning in a supportive context: joint contributions of positive mood, negative mood, and supervisory behaviors to employee creativity. *Management Journal,* 50, 605-622.

Gotlib, I. H. and Hammen, C. L. eds., 2009. *Handbook of depression*. New York: Guilford.

Gotz, A. A., Martin, W. and Volker, S., 2008. Psychosocial maternal stress during pregnancy: effects on reproduction for F0 and F1 generation laboratory rats. *Physiology and Behavior,* 93, 1055-1060.

Graham, C., Eggers, A. and Sandip, S., 2004. Does happiness pay? An exploration based on panel data from Russia. *Journal of Economic Behavior and Organization,* 55, 319-342.

Grant, N., Wardle, J. and Steptoe, A., 2009. The relationship between life satisfaction and health behaviour: a cross-cultural analysis of young adults. International Journal of Behavioral Medicine, 16, 259-268.

Green, J. D., Sedikides, C., A., S. J., Wood, J. V. and Forzano, L. B., 2003. Happy mood decreases self-focused attention. *British Journal of Social Psychology,* 42, 147-157.

Gruber, J., Mauss, I. B. and Tamir, M., 2011. A dark side of happiness: how, when, and why happiness is not always good. *Perspectives on Psychological Science,* 6, 222-233.

Harter, J. K., Schmidt, F. L., Asplund, J. W., Killham, E. A. and Agrawal, S., 2010. Causal impact of employee work perceptions on the bottom line of organizations. *Perspectives on Psychological Science,* 5, 378-389.

Hertel, G., Neuhof, J., Theuer, T. and Kerr, N. L., 2000. Mood effects on cooperation in small groups: Does positive mood simply lead to more cooperation? *Cognition and Emotion,* 2000, 441-472.

Howell, R. T., Kern, M. L. and Lyubomirsky, S., 2007. Health benefits: meta-analytically determining the impact of well-being on objective health outcomes. *Health Psychology Review,* 1, 83-136.

Ilies, R., Scott, B. A. and Judge, T. A., 2006. The interactive effects of personal traits and experienced states on intraindividual patterns of citizenship behavior. *Academy of Management*, 49, 561-575.

Inglehart, R., Foa, R., Peterson, C. and Welzel, C., 2008. Development, freedom, and rising happiness: a global perspective (1981-2007). *Perspectives on Psychological Science,* 3, 264-285.

Isen, A. M., Daubman, K. A. and Nowicki, G. P., 1987. Positive affect facilitates creative problem solving. *Journal of Personality and Positive Psychology,* 52, 1122-1131.

Johnson, K. J. and Fredrickson, B. L., 2005. "We all look the same to me" Positive emotions eliminate the own-race bias in face recognition. *Psychological Science*, 16, 875-881.

Jovanovic, V. and Brdaric, D., 2012. Did curiosity kill the cat? Evidence from subjective well-being of adolescents. *Personality and Individual Differences,* 52, 380-384.

Judge, T. A. and Kinger, R., 2007. Job satisfaction: Subjective well-being at work. In M. Eid and R. Larsen, eds. *The science of subjective well-being*. New York: Guilford Publications.

Judge, T. A., Piccolo, R. F., Podsakoff, N. P., Shaw, J. C. and Rich, B. L., 2010. The relationship between pay and job satisfaction: A meta-analysis of the literature. *Journal of Vocational Behavior,* 77, 157-167.

Judge, T. A., Scott, B. A. and Ilies, R., 2006. Hostility, job attitudes, and workplace deviance: test of a multilevel model. *Journal of Applied Psychology,* 91, 126-138.

Judge, T. A., Thoreson, C. J., Bono, J. E. and Patton, G. K., 2001. The job satisfaction-job performance relationship: a qualitative and quantitative review. *Psychological Bulletin,* 127, 376-407.

Kazdin, A. E., Esveldt-Dawson, K. and Matson, J. L., 1982. Changes in children's social skills performance as a function of preassessment experiences. *Journal of Clinical Child Psychology,* 11, 243-248.

Kessler, R. C., 2012. The costs of depression. *The Psychiatric Clinics of North America,* 35, 1-14.

Kiecolt-Glaser, J. K., McGuire, L., Robles, T. F. and Glaser, R., 2002. Emotions, morbidity, and mortality: new perspectives from psyhoneuroimmunology. *Annual Review of Psychology,* 53, 83–107.

Koivumaa-Honkanen, H., Honkanen, R., Viinamaki, H., Heikkila, K., Kaprio, J. and Koskenvuo, M., 2001. Life satisfaction and suicide: a 20-year follow-up study. *American Journal Psychiatry,* 158, 433-439.

Kubzansky L. D., Gilthorpe M. S. and Goodman E., 2012. A prospective study of psychological distress and weight status in adolescents/young adults. *Annals of Behavioral Medicine,* 43, 219-228.

Lawler, E. J., Thye, S. R. and Yoon, J., 2000. Emotion and group cohesion in productive exchange. *American Journal of Sociology* 106, 616-657.

Lawless, N. M. and Lucas, R. E., 2011. Predictors of regional well-being: a county level analysis. *Social Indicator Research,* 101, 341-357.

Lee, K. and Allen, N. J., 2002. Organizational citizenship behavior and workplace deviance: the role of affect and cognitions. *Journal of Applied Psychology*, 87, 131-142.

Leitzel, J. D., 2000. A confirmatory factor analytic investigation of the tripartite model of depression and anxiety in high school adolescents. *Dissertation Abstracts International,* 2000-95024-186 (Dissertation Number AA19976359).

Lerner, J. S., Li, Y. and Weber, E. (in press). The financial cost of sadness. *Psychological Science.*

Lount, J. R. B., 2010. The impact of positive mood on trust in interpersonal and intergroup interactions. *Journal of Personality and Social Psychology,* 98, 420-433.

Lucas, R. E., Diener, E., Grob, A., Suh, E. M. and Shao, L., 2000. Cross-cultural evidence for the fundamental features of extraversion. *Journal of Personality and Social Psychology*, 79, 452-468.

Luechinger, S., 2009. Valuing air quality using the life satisfaction approach. *The Economic Journal,* 119, 482-515.

Luhmann, M., Lucas, R. E., Eid, M. and Diener, E., 2013. The prospective effect of life satisfaction on life events. *Social Psychological and Personality Science*, 4, 39-45.

Lyubomirsky, S., King, L. A. and Diener, E., 2005. The benefits of frequent positive affect: does happiness lead to success? *Psychological Bulletin,* 131, 803-855.

Marks, G. N. and Fleming, N., 1999. Influences and consequences of well-being among Australian young people: 1980-1995. *Social Indicators Research,* 46, 301-323.

Mehl, M. R., Vazire, S., Holleran, S. E. and Clark, C. S., 2010. Eavesdropping on happiness: well-being is related to having less small talk and more substantive conversations. *Psychological Science,* 21, 539-541.

Morrison, M., Tay, L. and Diener, E., 2012. Subjective well-being across the lifespan worldwide. Paper submitted for publication, University of Western Toronto.

Moum, T., 1996. Subjective well-being as a short- and long-term predictor of suicide in the general population. Paper presented at the *World Conference in Quality of Life*, University of Northern British Columbia, Prince George, Canada. August 22-25.

Myers, D. G., 2000. The funds, friends, and faith of happy people. *American Psychologist,* 55, 56-67.

Neggers, Y., Goldenberg, R., Cliver, S. and Hauth, J., 2006. The relationship between psychosocial profile, health practices, and pregnancy outcomes. *Acta Obstetricia et Gynecologica Scandinavica,* 85, 277-285.

Nelson, D. W., 2009. Feeling good and open-minded: the impact of positive affect on cross cultural empathic responding. *Journal of Positive Psychology*, 4, 53-63.

Oishi, S., Diener, E. and Lucas, R., 2007. The optimum level of well-being: can people be too happy? *Perspectives on Psychological Science,* 2, 346–360.

Ong, A. D., 2010. Pathways linking positive emotion and health in later life. *Current Directions in Psychological Science,* 19, 358-362.

Organ, D. W. and Ryan, K., 1995. A meta-analytic review of attitudinal and dispositional predictors of organizational citizenship behavior. *Personnel Psychology,* 48, 775-802.

Orr, S. T. and Miller, A., 1995. Maternal depressive symptoms and the risk of poor pregnancy outcome. *Epidemiologic Reviews,* 17, 165-171.

Ostir, G. V., Markides, K. S., Peek, M. K. and Goodwin, J. S., 2001. The association between emotional well-being and the incidence of stroke in older adults. *Psychosomatic Medicine,* 63, 210-215.

Oswald, A. J., Proto, E. and Sgroi, D., 2012. Happiness and productivity. University of Warwick, Manuscript submitted for publication.

Pelled, L. H. and Xin, K. R., 1999. Down and out:aAn investigation of the relationship between mood and employee withdrawal behavior. *Journal of Management,* 25, 875-895.

Peterson, S. J., Luthans, F., Avolio, B. J., Walumbwa, F. O. and Zhang, Z., 2011. Psychological capital and employee performance: a latent growth modeling approach. *Personnel Psychology,* 64, 427-450.

Pettay, R. S., 2008. *Health behaviors and life satisfaction in college students*. Doctoral Dissertation, Kansas State University.

Pressman, S. D. and Cohen, S., 2005. Does positive affect influence health? *Psychological Bulletin,* 131, 925–971.

_____2012. Positive emotion word use and longevity in famous deceased psychologists. *Health Psychology,* 31, 297-305.

Priller, E. and Schupp, J., 2011. Social and economic characteristics of financial and blood donors in Germany. *DIW Economic Bulletin*, 6, 23-30.

Rasmussen, H. N, Scheier, M. F. and Greenhouse, J. B., 2009. Optimism and physical health: a review. *Annals of Behavioral Medicine,* 37, 239-256.

Riketta, M., 2008. The causal relation between job attitudes and performance: a meta-analysis of panel studies. *Journal of Applied Psychology,* 93, 472-481.

Romera, I., Perez, V., Menchon, J. M., Delgado-Cohen, H., Polavieja, P. and Gilaberte, I., 2010. Social and occupational functioning impairment in patients in partial versus complete remission of a major depressive disorder episode. A six-month prospective epidemiological study. *European Psychiatry,* 25, 58-65.

Rugulies, R., 2002. Depression as a predictor for coronary heart disease: a review and meta-analysis. *American Journal of Preventive Medicine,* 23, 51-61.

Russ. T. C., Stamatakis, E., Hamer, M., Starr, J. M., Kivimaki, M. and Batty, G. D., 2012. Association between psychological distress and mortality: individual participant pooled analysis of 10 prospective cohort studies. *British Medical Journal,* 31, 345.

Schneider, M., Graham, D., Grant, A., King, P. and Cooper, D., 2009. Regional brain activation and affective response to physical activity among healthy adolescents. *Biological Psychology,* 82, 246-252.

Slopen, N., Kubzansky, L. D., McLaughlin, K. A. and Koenen, K. C., 2012. Childhood adversity and inflammatory processes in youth: a prospective study. *Psychoneuroendocrinology*, in press.

Smith, T. W., Glazer, K., Ruiz, J. M. and Gallo, L. C., 2004. Hostility, anger, aggressiveness, and coronary heart disease: an interpersonal perspective on personality, emotion, and health. *Journal of Personality,* 72, 1217-1270.

Snyder, H. R., 2012. Major depressive disorder is associated with broad impairments on neuropsychological measures of executive function: a meta-analysis and review. *Psychological Bulletin,* Advance online publication. doi: 10.1037/a0028727

Spector, P. E. and Fox, S., 2002. An emotion-centered model of voluntary work behavior: some parallels between counterproductive work behavior and organizational citizenship behavior. *Human Resource Management Review,* 12, 269-292.

Steptoe, A., Dockray, S. and Wardle, J., 2009. Positive affect and psychobiological processes relevant to health. *Journal of Personality,* 77, 1747-1776.

Steptoe, A., Wardle, J. and Marmot, M., 2005. Positive affect and health-related neuroendocrine, cardiovascular, and inflammatory processes. *Proceedings of National Academy of Sciences,* 102, 6508-6512.

Strine ,T. W., Mokdad, A. H., Dube, S. R., Balluz, L. S., Gonzalez, O., Berry, J. T., Manderscheid, R. and Kroenke, K., 2008b. The association of depression and anxiety with obesity and unhealthy behaviors among community-dwelling US adults. *General Hospital Psychiatry* 30, 127-137.

Strine, T. W., Mokdad, A. H., Balluz, L. S., Gonzalez, O., Crider, R., Berry, J. T.and Kroenke, K., 2008a. Depression and anxiety in the United States: findings from the 2006 Behavioral Risk Factor Surveillance System. *Psychiatric Services*, 59, 1383-1390.

Stutzer, A. and Frey, B. S., 2006. Does marriage make people happy, or do happy people get married? *Journal of Socio-Economics*, 35, 326-347.

Tay, L. and Diener, E., 2011. Needs and subjective well-being. *Journal of Personality and Social Psychology,* 101, 354-365.

Tay, L., Tan, K., Diener, E. and Gonzalez, E., 2012. Social relations, health behaviors, and health outcomes: a survey and synthesis. *Applied Psychology: Health and Well-Being*, in press.

Watson, D., Clark, L. A., Weber, K., Assenheimer, J. S., Strauss, M. E. and McCormick, R. A., 1995. Testing a tripartite model: II. Exploring the symptom structure of anxiety and depression in student, adult, and patient samples. *Journal of Abnormal Psychology,* 104, 15-25.

Weiss, A., Adams, M. J. and King, J. E., 2011. Happy orang-utans live longer lives. *Biology Letters,* 7, 872-874

Wiest, M., Schuz, B., Webster, N. and Wurm, S., 2011. Subjective well-being and mortality revisited: differential effects of cognitive and emotional facets of well-being on mortality. *Health Psychology,* 30, 728-735.

Williamson, D. M., Abe, K., Bean, C., Ferre, C., Henderson, Z. and Lackritz, E., 2008. Current research in preterm birth. *Journal of Women's Health,* 17, 1545-1549.

Wisner, K. L., Sit, D. K. Y., Hanusa, B.H., Moses-Kolko, E. L., Bogen, D. L., Hunker, D. F., Perel, J. M., Jones-Ivy, S., Bodnar, L. M. and Singer, L.T., 2009. Major depression and antidepressant treatment: impact on pregnancy and neonatal outcomes. *Focus,* 7, 374-384.

Yang, J. and Diefendorff, J. M., 2009. The relations of daily counterproductive workplace behavior with emotions, situational antecedents, and personality moderators: a diary study in Hong Kong. *Personnel Psychology,* 62, 259-295.

Zorrilla, E. P., Luborsky, L., McKay, J. R., Rosenthal, R., Houldin, A., Tax, A., McCorkle, R., Seligman, D. A. and Schmidt, K., 2001. The relationship of depression and stressors to immunological assays: a meta-analytic review. *Brain Behaviour and Immunity*, 15, 199-226.

Chapter 7: Psychological Wellbeing

— Alejandro Adler, Wenceslao Unanue, Evgeny Osin, Matthieu Ricard, Sabina Alkire & Martin Seligman

Domain description

What is psychological wellbeing?

Psychological well-being is simultaneously the absence of the crippling elements of the human experience – depression, anxiety, anger, fear – and the presence of enabling ones – positive emotions, meaning, healthy relationships, environmental mastery, engagement, self-actualization. Psychological well-being is above and beyond the absence of psychological ill-being and it considers a broader spectrum of constructs than what is traditionally conceived of as happiness (Seligman and Csikszentmihalyi, 2000; Seligman, 2011).

Psychological wellbeing includes the absence of disorders, such as major depression or schizophrenia. An individual suffering from mental disorders can hardly experience psychological wellbeing. However, absence of those disorders does not guaranty psychological flourishing. Since society traditionally supports mental illness within its healthcare system, it belongs in the health domain and it will not be a focus of this chapter. Only some of the interventions described below can both alleviate mental illness and improve positive psychological functioning. Most of the recommendations in this chapter are aimed at amplifying psychological health assets.

Subjective well-being (SWB), "good mental states, including all of the various evaluations, positive and negative, that people make of their lives and the affective reactions of people to their experiences," is part of psychological well-being (OECD, 2013). It is often conceptualized as a set of two interrelated elements:

1. Life evaluation – a reflective assessment on a person's life or some specific aspect of it.
2. Affect – a person's feelings or emotional states, typically measured with reference to a particular point in time.

The notion of subjective wellbeing (SWB) is the currently dominant conception of happiness in psychological literature. There are several empirically informed models which aim to determine the structure of SWB. Bradburn (1969) found SWB to be a function of the independent dimensions of general positive and negative affectivity. This definition of SWB has since been extended and SWB is

currently considered to be a multidimensional construct, referring to several distinct, but related aspects treated as a single theoretical construct. SWB encompasses how people evaluate their own lives in terms of both affective (how we feel) and cognitive components (what we think) of well-being (Diener et al., 1999; Diener, Scollon and Lucas, 2003; Veenhoven, 1994). Overall, high SWB is seen to combine three specific factors: (1) frequent and intense positive affective states, (2) the relative absence of negative emotions, and (3) global life satisfaction. Research has shown that the affective and cognitive components of SWB are separable (Lucas et al., 1996) but there is some debate over the relative contributions of these two factors, with cognitive elements being seen as primary by some authors (e.g. Diener and Seligman, 2004), something which is refuted by others (e.g. Davern, Cummins and Stokes, 2007). Methodologies for measuring SWB are firmly grounded in this paradigm (Lyubomirsky and Lepper, 1999; Diener et al., 1985; Watson, Clark and Tellegen, 1988).

There is considerable evidence that SWB, often also referred to as hedonic well-being, does not provide a full picture of what well-being and happiness are, failing to capture the complexity of philosophical conceptions around the notion of happiness, and to factor in the longstanding ideas of humanistic and existential schools of thought. An alternative approach is the so-called eudaemonic paradigm, where well-being is construed as an ongoing, dynamic process (rather than a fixed state) of effortful living by means of engagement in an activity perceived as meaningful (Kopperud and Vittersø, 2008; Ryan and Deci, 2001; Vittersø, Overwien and Martinsen, 2009). Advocates of eudaemonic approach argue that living a life of virtue, and actualizing one's inherent potentials is the way to well-being (Delle Fave, Massimini and Bassi 2011).

The concept of eudaemonia was first proposed by Aristotle (Aristotle, 1985) who argued that living a life of contemplation and virtue, in accordance with one's inherent nature (i.e. living authentically) was the pathway to well-being (Norton, 1976). Positive emotional experiences were not central to Aristotle's conception of a good life and he was against the idea of the pursuit of hedonic pleasure purely for pleasure's sake (Waterman, 2008). Despite this, Aristotle acknowledged that often the result of eudaemonic action was hedonic pleasure (Kashdan, Biswas-Diener and King, 2008). There have been different approaches to defining eudaemonia in the field of positive psychology (Kashdan, Biswas-Diener and King, 2008) with researchers identifying a number of different aspects, such as personal growth and meaning in life, purpose, autonomy, competence, self-realization, mindfulness, self-acceptance, authenticity, values congruence, and social connectedness (Delle Fave, Massimini and Bassi, 2011; Baumeister and Vohs 2002; Huta and Ryan, 2010; Ryan and Deci, 2000). Eudaemonia can be thought of at both the well-being and activity levels. For example, Waterman's (2008) conceptualization of eudaemonia emphasizes the

importance of developing one's potentials, and living in accordance with one's true self (i.e. looking at activities), whereas other conceptualizations have emphasized the quality of life as a whole (i.e. eudaemonic well-being). Hedonic well-being has emphasized the importance of feeling good, whereas eudaemonic well-being has often been defined in terms of functioning well on multiple domains of life (Keyes and Annas, 2009; Ryan and Huta, 2009).

Psychological well-being goes beyond the three domains of subjective well-being; it integrates hedonic and eudaemonic well-being. Psychological well-being considers both subjective and objective measures of a broader set of domains. The development of an integral conception of psychological well-being that goes beyond emotional indicators (happiness, life satisfaction, affect balance) is the framework on which we base this chapter. Below, we discuss conceptions of psychological well-being that integrate hedonic and eudaemonic elements in more detail (Seligman, 2011; Ryff and Keyes, 1995).

The field of psychology has traditionally focused most of its efforts on the study of psychopathology and how to eliminate it. The relatively novel field of positive psychology complements this historic approach by providing the missing piece of psychological well-being – the study of flourishing individuals, institutions, and societies – to yield a fully descriptive model of healthy psychological functioning.

Although originally grounded in happiness and positive emotion, as empirical studies have been conducted during the last two decades, the field's understanding of well-being has evolved (Diener, Scollon and Lucas, 2003). Well-being is now thought of as not simply positive emotion, but rather as flourishing – thriving across multiple areas of life.

Seligman's (2011) Wellbeing Theory delineates the five domains of life that people pursue for their own sake (positive emotion, engagement or flow, positive relationships, meaning or purpose, and achievement, or PERMA). Ryff ans Keyes (1995) suggested six components of psychological well-being (self-acceptance, positive relationships with others, autonomy, environmental mastery, purpose in life, personal growth). At the societal level, Gallup has created the Healthways Well-being Index that includes life evaluation, emotional health, physical health, healthy behaviours, work environment, and basic access (Kahneman and Deaton, 2010). The Organization for Economic Cooperation and Development (OECD) has created the *Your Better Life Index*, comprised of 11 topics considered essential to quality of life (housing, income, jobs, community, education, environment, governance, health, life satisfaction, safety, work-life balance). The index allows countries to identify the topics most important to them. Notably, each of these models and indices suggest that well-

being consists of profiles across multiple domains, not simply a single number (Forgeard et al., 2011). Individuals, organizations, and governing boards can decide which elements are most important, see how they compare to others, and devise strategic ways to change.

Existing sub-domains of psychological wellbeing

In the GNH Index, psychological wellbeing has three components. The first is spirituality – meditation or mindfulness practices, and the consideration of the consequences of one's actions. The second is emotional balance, which is the outcome of emotional intelligence, and the cultivation of positive emotions such as generosity, empathy, and compassion. The third is evaluative satisfaction with respect to different domains of GNH.

Alternative sub-domains

To complement the current domains of the GNH index and integrate the best available psychological well-being research, we suggest the following alternative sub-domains, each of which has been extensively studied and each of which has validated measurement tools:

- Engagement
- Relationships
- Meaning and purpose
- Achievement or mastery
- Mental illness (e.g., depression, anxiety, schizophrenia)

Intrinsic value of the domain

Flourishing (εὐδαιμονία) was defined by Aristotle as being the ultimate goal of human existence; he viewed it as being important in its own right, not just as a means to an end. Psychological well-being is an intrinsically valuable and desired state of being comprised of reflective and affective elements. Reflective indicators provide an appraisal of how satisfied people are in various aspects of their lives while the affective indicators provide a hedonic evaluation guided by emotions and feelings.

The discipline of Positive Psychology studies what free people choose when they are not oppressed. How to measure and build psychological well-being can be distinguished from the worthy concerns of psychology-as- usual, which by and large studies disabling conditions—anxiety, prejudice, trauma, substance abuse, autism and the like--and how to relieve the misery they cause. Psychology-as-usual asks how individuals can go from minus eight to minus two in life; but it must be emphasized that any remedial endeavour—even if completely successful—asymptotes at zero. Under conditions of abundance and freedom, non-oppressed people often want to know more than just how to rid

themselves of deficits. They want to know how to go from plus three to plus seven in life. The underlying rationale for this chapter is the intuition that merely removing psychologically disabling conditions is not equivalent to building the conditions that would enable psychological flourishing. Just as for an economist, knowing how to allocate scarce resources optimally is not equivalent to knowing what economic conditions will enable flourishing, so for a psychologist, knowing how to relieve sadness, anger, and fear does not tell us much about how to have more positive emotion, more meaning, better relationships, and more achievement in life.

Hypothetical constructs, such as freedom or wellbeing, are not "operationally" *defined* by their elements. So no one of these elements is necessary or sufficient for well-being, but each contributes to it. To make the list more exhaustive, there are other possible elements currently being debated as meeting the three criteria for being an element; among them spirituality and responsibility. The debate concerns whether these are pursued for their own sake, or only to achieve one or more of the other elements. (Do we want spirituality for its own sake or only because it brings happiness, satisfaction, lack of pain, more accomplishment, or better relations?)

Wellbeing Theory (Seligman, 2011) is plural: it is a dashboard theory and not a final-common-path, monistic approach to human psychological flourishing. Positive emotion alone is only a subjective variable; what you think and feel is dispositive. The other elements can have both subjective and objective indicators. Engagement, meaning, relationships and accomplishment have both subjective and objective components, since you can believe you have engagement, meaning, good relations and high accomplishment and be wrong, even wholly deluded. To measure relationships, for example, we want to know what you think about the quality of your marriage, but also want to know what your wife and children think about the marriage, as well as the frequency of arguments and of sexual relations. The upshot of this is that psychological well-being cannot exist just in your own head: it is a combination of feeling good as well as actually having meaning, engagement, good relationships, and accomplishment.

This plurality of psychological wellbeing is why economist Richard Layard's (2005) important argument that subjective "happiness" is the final common path and the gold standard measure for all policy decisions does not work. Richard's theory sensibly departs from the typical economist's view of wealth — that the purpose of wealth is to produce more wealth. For Richard, the rationale for increasing wealth is to increase happiness, and so he promotes happiness as the single outcome measure that should inform public policy. While we welcome this development, we disagree with the idea that subjective happiness is the be-

all and end-all of well-being and its best measure. Happiness and life satisfaction are useful subjective measures, and they belong on the dashboard, but psychological well-being cannot exist just in your own head. Public policy aimed only at subjective well-being is vulnerable to the 1932 *Brave New World* caricature ("just drug them into happiness with *soma*"). It also stumbles fatally on the fact that human beings persist in having children: couples without children are likely happier, subjectively, than childless couples, and so if all humans pursued were subjective happiness, the species would have died out long ago. Truly useful measurement of psychological well-being for public policy will need to be a dashboard of subjective measures of life satisfaction, along with both subjective and objective measures of engagement, meaning, good relationships, and positive accomplishment.

Instrumental value of the domain

Psychological well-being also has tremendous instrumental value, being associated with better health, higher immunity, more stable and satisfying relationships, better performance and upwards progression in work, and much more. Recent literature on this is particular vast although particular associations depend naturally upon the particular measure(s) of psychological well-being that are being used.

There is robust evidence that different domains of psychological well-being are important contributors to advantageous life-outcomes in adults. Studies show that:

- Individuals with higher life-satisfaction enjoy better physical health, greater accomplishment, better social relationships, and more productive economic contributions to society (Howell, Kern and Lyubomirsky, 2007; Lyubomirsky, King and Diener, 2005; Pressman and Cohen, 2005).
- Optimists overall have better physical health outcomes, including faster recovery from surgery, less reported illness, lower mortality risk, better social relationships, and less smoking and drinking (Fry and Debats, 2009; Segestrom, 2007; Shen, McCreary and Myers, 2004).
- People with more positive emotion exhibit better social relationships, healthier behaviors, and better self-reported health (Howell, Kern and Lyubomirsky, 2007; Lyubomirsky, King and Diener, 2005; Pressman and Cohen, 2005; Salovey et al., 2000).
- People who feel more gratitude experience fewer somatic symptoms (Froh, Yurkewicz and Kashdan, 2009).
- Positive social relationships lead to better physical and psychological functioning (Taylor, 2007).

- Positive affect reduces the racial biases individuals have towards others (Johnson and Fredrickson, 2005).
- Individuals with higher levels of SWB have been shown to have stronger immune systems (e.g., Dillon, Minchoff and Baker, 1985; Stone and Shiffman, 1994), to live longer (e.g., Danner, Snowdon and Friesen, 2001; Ostir et al., 2000), to have reduced cardiovascular mortality (Chida and Steptoe, 2008), lower levels of sleep complaints (Brand et al., 2010), lower levels of burnout (Haar and Roche, 2010), greater self-control, self-regulatory and coping abilities (e.g., Fredrickson and Joiner, 2002), to be relatively more cooperative, pro-social, charitable, and other-centred (e.g., Kasser and Ryan, 1996; Williams and Shiaw, 1999) than individuals with lower SWB.

There is also strong evidence that psychological well-being has positive downstream effects in children and adolescents. Research has found that:

- Self-esteem and positive emotions have physical health benefits (Hoyt et al., 2012).
- Holding socioeconomic status, grades, and other life-factors constant, happy teenagers earn substantially more money than less happy teenagers 15 years later in life (Diener et al., 2002).
- Meaningful relationships with adult figures can buffer against negative outcomes such as depression, gang membership, juvenile delinquency, risky sex, and substance abuse (Hamre and Pianta, 2001).
- More perseverant adolescents show healthier behaviors, greater educational attainment, better job performance, stronger marriages, better self-rated health, longer lives related to fewer injuries and hospitalizations, and fewer self-reported health problems 25 years later (Bogg and Roberts, 2004; Kern and Friedman, 2008; Roberts et al., 2007).
- Student engagement levels are highest when students feel challenged and feel that their skills are being used (Shernoff et al., 2003).
- Students with more psychological well-being are consistently better at learning. Negative emotions create attention that is more restricted, more critical thinking, and more analytic thinking. On the flip side, positive emotions generate more creative thinking, more holistic thinking, and broader attention (Bolte, Goschke and Kuhl, 2003; Estrada, Isen and Young, 1994; Fredrickson, 1998; Fredrickson and Branigan, 2005; Isen, Daubman and Nowicki, 1987; Isen, Rosenzweig and Young, 1991; Kuhl, 1983; 2000; Rowe et al., 2007; Seligman et al., 2009).

Traditional public policy

Governments continue to organize their politics and economics almost completely around the relief of suffering via blind economic growth. Modern nations usually employ standard social and economic indicators to allocate limited resources and to measure societies' well-being. Traditional economists and policy makers have assumed that all the activities in societies (consumption, production, externalities, etc.) may be measured in terms of monetary cost and benefits, but that also the objective indicators – especially GDP – reflect the desirable aspects which a nation wants to achieve. However, two main concerns arise. First, not all market activities may be measured in terms of money. Second, despite the fact that traditional measures of progress provide useful information to governments, business, communities, and individuals, they show only a few aspects of the quality of life for people and nations (Diener et al., 2009; Stiglitz, Sen and Fitousi, 2010).

The only element of traditional public policy that partially addresses psychological well-being is public health. However, public health has two limitations. Firstly, it addresses mental illness, but does not include positive psychological functioning. Secondly, many public health systems in the world do not address mental illness, due to either taboos surrounding psychopathology or to ignorance about the issue. An effective public health system should address the prevention and treatment of mental illness, as well as the promotion of psychological flourishing.

Traditional public policy neither directly targets psychological well-being, by teaching the tools of flourishing via formal and non-formal education, nor indirectly targets it, by providing the enabling conditions of positive psychological functioning (see sections below for details about specific public policies). Currently, public policy assumes that psychological well-being is a natural downstream effect of economic growth, when there is now robust literature which shows that past the threshold of satisfying basic needs, increased wealth has a marginal or null impact on psychological well-being (Easterlin, 2001).

There is, therefore, an urgent need for a new model of development that better represents real changes in people's quality of life (Stiglitz, Sen and Fitousi, 2010). Yet, there is no single measure that can capture the complexity of the whole society. Further, traditional measures of progress need to be complemented with measures that better represent changes in quality of life (Helliwell, Layard and Sachs 2012a; 2012b; Layard, 2011; Stiglitz, Sen and Fitousi, 2010).

Recently, well-known institutions – such as the Stiglitz Commission, the United Nations, and the OCDE – have supported these claims pointing out the need for subjective well-being indicators to improve the quality of the information provided by standard measures of progress (Diener et al., 2009; Helliwell, Layard and Sachs, 2012a; 2012b). The most important advantage of using psychological well-being measures is the subjective nature of the self-report instruments (Helliwell and Wang, 2012). Subjective questions allow people to talk about the quality of their own lives, reflecting their own histories, personalities and preferences. They reflect what people think is important and desirable, not what experts or governments think individuals freely pursue or what defines a good life.

Traditional indicators of national progress are the DNA code and drivers of existing public policy. Currently, the grand majority of these national indicators are reduced to GDP, and the corresponding public policies are aimed at economic growth alone. Measures of psychological well-being would provide indisputably valuable information to complement existing measures of national welfare and construct public policies that genuinely enhance individuals' lives.

Major research findings of potential relevance to new public policy

Mindfulness

Many studies have highlighted the link that exists between altruism and well-being (Myers, 2000; Diener and Seligman, 2002). Research done by Martin Seligman in particular indicates that the joy of undertaking an act of disinterested kindness provides profound satisfaction (Seligman, 2002). In this study, some students were given a sum of money and asked to go out and have fun for a few days, while others were told to use this money to help people in need (elderly, sick patients, etc.) All were asked to write a report for the next class. The study has shown that the satisfactions triggered by a pleasant activity, such as going out with friends, seeing a movie, or enjoying a banana split, were largely eclipsed by those derived from performing an act of kindness. When the act was spontaneous and drew on humane qualities, the entire day was improved; the subjects noticed that they were better listeners that day, friendlier, and more appreciated by others.

The collaborative research involving neuroscientists and Buddhist contemplatives began in earnest fifteen years ago. These studies led to numerous publications that have established the credibility of research on meditation and on achieving emotional balance, an area that had not been taken seriously until then. In the words of the American neuroscientist Richard Davidson, "the research on meditation demonstrates that the brain is

capable of being trained and physically modified in ways few people can imagine." (Kaufman, 2005).

While meditating on loving-kindness and compassion (Lutz et al., 2004), most experienced meditators showed a dramatic increase in the high-frequency brain activity called gamma waves in areas of the brain related with positive emotions and with empathy.

The research in neuroscience and psychology indicates that loving-kindness, mindfulness, and compassion are among the most positive of all positive emotions or mental states, as Barbara Fredrickson (2013), a pioneer in the field of positive psychology, has found about altruistic love and its corresponding "positive resonance" (Fredrickson, 2013).

Barbara Fredrickson tested the effects of learning on self-generated positive emotions through loving kindness meditation. She tested 140 volunteers with no previous experience in meditation and randomly assigned 70 of them to practice loving-kindness meditation 30 minutes a day for seven weeks. She compared the results with the 70 others subjects who did not follow the training. The results were abundantly clear. In her words, "When people, completely new to meditation, learned to quiet their minds and expand their capacity for love and kindness, they transformed themselves from the inside out. They experienced more love, more engagement, more serenity, more joy, more amusement – more of every positive emotion we measured. And though they typically meditated alone, their biggest boosts in positive emotions came when interacting with others. Their lives spiralled upwards. The kindheartedness they learned to stoke during their meditation practice warmed their connections with others." (Fredrickson et al., 2008) Later experiments confirmed that it was these connections that most affected their bodies, making them healthier (Kok and Fredrickson, 2010).

Psychologist Michael Dambrun and Mathieu Ricard (Dambrun and Ricard, 2011) have argued that lasting psychological well-being is associated with selflessness rather than self-centeredness. The scientific literature reviewed by these two authors indicates that highly self-centered people are more focused on enjoying hedonic pleasure than on cultivating eudemonic psychological well-being and that, consequently, only a fluctuating well-being will result. Conversely, people who reduce their self-centered tendencies seem to enjoy the quality of a life filled with inner peace, fulfilment, and serenity, as opposed to a life filled with inner conflicts and afflictions.

Generosity, the natural outcome of altruism, has also been found to accomplish the twofold benefit of others and oneself. Social psychologist Elizabeth Dunn of

the University of British Columbia (UBC) in Vancouver, Canada, found that people who reported spending money on others were happier that those who spend all their resources on themselves (Dunn et al., 2008; 2011; Aknin, Norton and Dunn, 2009).

Case study 1 on mindfulness: Meditation in Prison (India and US)

This is a program of Vipassana mediation in prisons that reduces violence and recidivism. It has been introduced in some prisons in India (most notably Tihar) and the United States. Much of the training is done by teachers from The Art of Living Foundation (headquartered in Bangalore, India), which was founded in 1981 by Sri Sri Ravi Shankar. Art of Living also trains prison guards and police. Training is intense, usually consisting of days filled with ten hours of sitting meditation.

At the Tihar Jail, which was built in the 1950s for few thousand inmates and was overcrowded, anger and anguish were commonplace — particularly among the innocent who often had to wait months, even years for a court date or to make bail. "That's why it's so important to help them to overcome stress," says Akhilesh Chabra, of the Art of Living. "They are seething with negative emotions, very bitter yet helpless. Meditation improves their frame of mind." Meditation helps inmates to cope. It has changed the atmosphere, according to staff and the inmates interviewed; inmates are calmer and more co-operative, relations with the staff more harmonious.

A study that examined the psychological and behavioral effects an intensive ten-day Vipassana Meditation (VM) retreats in a maximum security prison found that "VM participants achieved enhanced levels of mindfulness and emotional intelligence and had decreased mood disturbance relative to a comparison group. Both groups' rates of behavioral infractions were reduced at one-year follow-up. Clinically, VM holds promise for addressing self-regulation and impulse control, among other barriers to prisoner adjustment and community reentry" (Perelman et al., 2012).

Case study 2 on mindfulness: Search Inside Yourself – Mindfulness at Work (USA)

Alongside stories of meditation in prison or mindfulness against severe depression are stories of training in mindfulness or attention, self-knowledge and self-mastery, and the creation of useful mental habits – for staff of Google Inc as well as others. One of Google's popular courses for staff ongoing development is called "Search Inside Yourself." The course, which runs for 7 weeks and has 30 students per class, was developed by a Google Employee, Chade Meng, who has subsequently published a widely acclaimed book with

---

inputs from Daniel Goleman others called *Search Inside Yourself: The Unexpected Path to Achieving Success, Happiness, and World Peace.* In addition to teaching grounding practices of mindfulness and emotional intelligence, it also teaches how to apply these to a fast-paced work environment – skills such as mindful emailing.

Education for psychological wellbeing

Research finds that the tools for psychological well-being (1) can be taught in both formal settings, such as schools and universities, and in non-formal settings, such as corporations, governments, and prison, and (2) the these tools should be taught, due to the intrinsic and instrumental value of psychological well-being. The Education chapter in this report addresses these points in detail.

Case study on education: Roots of Empathy (Canada)

Roots of Empathy is an organization that works with children to teach empathy, and thus decrease aggression, anger, and bullying in children (and eventually when they grow up, adults). The program involves having a parent and a baby come into a classroom over the course of a year for nine visits. A facilitator hosts pre and post sessions and guides the visits. Children are taught to emphasize with the baby, to see the world from the baby's point of view, to understand more about parenting and child development.

"Children learn to understand the perspective of the baby and label the baby's feelings, and then are guided in extending this learning outwards so they have a better understanding of their own feelings and the feelings of others. This emotional literacy lays the foundation for more safe and caring classrooms, where children are... more socially and emotionally competent and much more likely to challenge cruelty and injustice" (Roots of empathy website 2013).

Location, scale, time period: Founded in 1996, now implemented in schools throughout Canada, including First Nations, as well as the US, New Zealand, the Isle of Man, Northern Ireland, the Republic of Ireland and Scotland. Though started by a Canadian, the program has been lauded both by the Dali Lama and formally endorsed in a resolution by First Nations, which stated that the program is "compatible with traditional First Nations teachings and worldviews." It has now been implemented in a number of First Nations communities and with Aboriginal children. It has reached over 450,000 children altogether.

Impact/Significance: Researchers have found that the program increases kindness and acceptance of others and decreases negative aggression (Bornstein, 2010). The program dramatically reduces aggression and increases

social and emotional understanding among children who receive it. Children who have participated in Roots of Empathy programs are kinder, more cooperative, and more inclusive of others, and are less aggressive and less likely to bully others compared to children who do not participate in the program. These positive effects have been shown to last at least three years (Bornstein. D, 2010).

Other domains

As the "Subjective Wellbeing Measures to Inform Public Policies" chapter in this report discusses in detail, novel research and scientific data has demonstrated that subjective indicators may be employed in important domain, such as *social capital and trust* (Helliwell, Layard and Sachs, 2012b; Layard, Clark and Senik, 2012), *materialism* (Diener et al., 2009; Dittmar, 2008; Kasser and Kanner, 2004; Kasser and Ryan, 1993; 1996), *externalities* (Diener et al., 2009; Helliwell and Huang, 2011; Luechinger and Raschky, 2009; Van Praag and Baarsma, 2004); *unemployment* (Diener et al., 2009; Green, 2011; Layard, Clark and Senik, 2012); *tax structures* (Cullis and Lewis, 1997; Layard, Clark and Senik, 2012), and health (Dolan, 2008; Dolan, Peasgood and White, 2008), among others. By complementing classical objective indicators with subjective measures of the quality of life, policy makers can obtain a more accurate picture of the well-being of both individuals and of societies, which may lead to a better and world with a greater tonnage of well-being (Diener et al., 2009; Helliwell, Layard and Sachs, 2012a).

a. Social capital and trust

Trust plays a key role in building social capital (Powdthavee, 2008; Meier and Stutzer, 2008). These are key findings to explain why life satisfaction has not risen in the US and UK in the last five decades, while it has improved considerably in Denmark and Italy. Levels of trust have fallen substantially over time in the former countries, but have risen in the latter ones (Layard, 2011; Layard, Clark and Senik, 2012).

b. The dangers of materialism

Research has found that higher materialism – a strong relative importance attached to material rewards – is associated with increases in individuals' mental disorders and with lower life satisfaction, vitality and positive emotions (Dittmar et al., 2012; Kasser and Ryan, 1993; 1996). These effects are especially dangerous for children below the age of 12 (Layard, Clark and Senik, 2012).

c. Externalities

In a key study, Van Praag and Baarsma (2004) compared self-reported life satisfaction measures of people living in areas with different airport noise. They showed that it is possible to assess the monetary value of the airport noise

damage as the sum of hedonic house price differentials and a residual cost component. The residual costs component was estimated from the effect on life satisfaction. This novel method not only provides an accurate estimate of the effect of noise, based on experience utility (Kahneman, Kahneman and Tversky, 2003), but also gives policy makers important information about different possible alternatives to compensate people affected by the externalities. For example, it is possible to determine the amount of money to be paid. The procedure is simple. First, the effect of noise on life satisfaction needs to be evaluated. Then, using the known association between intra-national differences in income and life satisfaction (Easterlin, 2001), it would be possible to determine a reasonable amount of money to compensate the neighbors in the affected area.

d. Unemployment

Unemployment has serious financial implications. Under the economic assumption that income is related to utility, job loss should lead to lower levels of psychological well-being. However, the main impact of unemployment on well-being goes beyond the loss of income (Stiglitz, Sen and Fitousi, 2010).

Unemployment produces a loss of social status, self-esteem, workplace social life, and confidence, and diminishes other factors that matter for a good quality of life (Layard, Clark and Senik, 2012). Unemployment also produces detrimental effects not only on family members, but also in communities where people live (Diener et al., 2009). Unemployment also matters for employees. The effects of extreme job insecurity and of unemployment have a serious detrimental effect on those who are still working (Green, 2011).

In a meta-analysis, Paul (2005, in Diener et al., 2009) found that the negative effects of unemployment are greater for working-class employees, for countries with higher income inequalities, and for nations with lower levels of unemployment protection. These results give key recommendations for public policies aimed at protecting people's well-being (Diener et al., 2009).

e. Tax structures

Governments require resources in order to take care of the responsibilities that citizens have given to them (e.g. education, health, justice). Taxation is the most common source of income. However, the question about what is the best tax structure always arises – are progressive or proportional tax structures better? Decisions are normally based on empirical and theoretical evidence regarding the maximum amount of money that governments can obtain through different tax systems (Stiglitz, 1988). However, it has been shown that a tax burden also has effects on people's psychological well-being (Cullis and Lewis, 1997; Layard, Clark and Senik, 2012).

f. Autonomy and basic need satisfaction

A number of studies within Self-Determination Theory (see Deci and Ryan, 2000) show that intrinsic motivation is facilitated by satisfaction of three basic psychological needs: the need for autonomy (making one's own choice), competence (the experience of success in what one does), and relatedness (the experience of being close to other people). They also show that environment can either support intrinsic motivation by providing opportunities for people to satisfy those basic needs (first of all, the need for autonomy), or support extrinsic motivation by controlling people using rewards and punishment.

g. Content of goals and happiness

The extent to which different activities (work or leisure) are satisfying is also dependent on the content of the goals at which those activities are directed. As Kasser and Ryan (1993) suggested, some goals (intrinsic, such as community contribution, health, personal growth, and affiliation) are more conducive to basic need satisfaction with resulting subjective experiences of meaning and happiness than other goals (extrinsic, such as fame, financial success, and physical appearance). Intrinsic goals are satisfying in their own right and more conducive of intrinsic motivation, as opposed to extrinsic goals that are undertaken for the sake of consequences external to the activity/task itself. However, an activity directed at extrinsic goals may be beneficial if it is instrumental for reaching intrinsic goals. For instance, when money is an end result of one's work (a 'having' orientation, in terms of Fromm, 1976), work may be psychologically detrimental to well-being, but when money is earned for the sake of some intrinsic goal (e.g., helping one's children or charity), it becomes rewarding.

Other approaches to the study of goal content have relevant results. Emmons (2003) shows that the three goal themes empirically associated with higher well-being are intimacy ("goals that express a desire for close, reciprocal relationships"), spirituality ("goals that are oriented to transcending the self"), and generativity ("a commitment and concern for future generations"), whereas the presence of power ("goals that express a desire to influence and affect others") strivings is associated with lower well-being. Summarizing these findings, Ryan, Huta and Deci (2008) propose a Self-Determination Theory model of eudaemonic happiness that is based on autonomous and self-determined action directed at goals that are intrinsically valued and have pro-social consequences.

6. Recommendations

Extensive research reveals several key areas which can be impacted by interventions at the public policy level: engagement, positive relationships, meaning, and autonomy.

Promoting engagement

Engagement is crucial for well-being. For most adults, work and family are the most important domains of engagement. The measures to improve the quality of time spent at work and with family are covered under the Time Use domain. Here we shall focus on policies providing engagement for two specific groups: unemployed and retired individuals.

a. Providing opportunities for volunteer work and civic engagement

Volunteer work is a result of conscious free choice guided by values and self-congruent goals (Gagné, 2003), and it is an activity that psychologically benefits both the recipient and the helper (Weinstein and Ryan, 2010). Findings from a robust longitudinal study indicate that volunteer work in the community enhances happiness, life satisfaction, self-esteem, sense of control, and physical health (Thoits and Hewitt, 2001). It is important that psychologically beneficial volunteer work engagement can only be based on an autonomous choice, rather than on external incentives. Millette and Gagné (2008) found that autonomous motivation is a mediator in the association between job characteristics and job satisfaction, and they suggest that volunteer jobs should use team work and establish contacts between volunteers and clients, volunteers and colleagues, as well as provide decision-making power and meaning in their work (e.g., mission of the organization). Policies can be developed to facilitate creation of different forms of organizations like NGOs and to facilitate the promotion of information about available opportunities to people.

b. Providing opportunities to elderly people to be engaged in meaningful activities

Advanced age is often associated with depression resulting from loss of relatives, increasing distance from children, and leaving work. A number of studies indicate the association of social engagement (a combination of social and productive activity) with decreased depression and with improved health and well-being (Glass et al., 2006). Low level of social engagement is a predictor of increased mortality in advanced age (Bennett, 2002), and group living is more beneficial than solitary living (Rothwell, Britton and Woods, 1983). However, interventions applied on a large scale should take into account individual preferences (Simpson, Woods and Britton, 1981).

Psychological well-being in old age increases when older adults combine effortful social, physical, cognitive, and household activities with restful activities (Oerlemans, Bakker and Veenhoven, 2011). Although, on average,

working elderly people are not happier than non-working ones, they experience higher levels of momentary happiness (Tadic et al., in press), and people who take voluntary retirement have higher well-being than those with mandatory retirement (Kimmel, Price and Walker, 1978). Volunteer work may be more beneficial than paid work for elderly well-being, keeping in mind the negative effects of overworking (Morrow-Howell, 2000; Morrow-Howell et al., 2003; Shmotkin, Blumstein and Modan, 2003; Greenfield and Marks, 2004; Windsor, Anstey and Rodgers, 2008).

c. Providing opportunities for creative and educational leisure collective activities

Community centers facilitate interactive and meaningful activity and they create social ties. In adolescents, involvement in structured group activities is associated with increased civic involvement and increased sense of community, which, in turn, predicts social well-being (Albanesi, Cicognani and Zani, 2007). Albanesi, Cicognani and Zani (2007) suggest that it is important to provide adolescents with more opportunities to experience a sense of belonging to the peer groups and to promote prosocial behaviours towards their communities.

Promoting relationships

Loneliness causes depression, whereas relationships and social support promote well-being. Policies to promote relationships can be developed for different groups, particularly at-risk groups.

a. Creating community housing for elderly and providing space for interaction

Socializing and getting and giving social support are important precursors to well-being in all age groups (e.g., Turner, 1981). An absence of opportunities to communicate leads to loneliness, which has strong detrimental effects on physical health and psychological well-being (Cacioppo, Hawkley and Berntson, 2003). Community housing provides people with better opportunities for interaction and prevent loneliness; however, planning should take into account the finding that spaciousness and other physical characteristics of the place are important factors of positive neighbouring (Skjaeveland and Garling, 1997; Kuo et al., 1998).

b. Supporting mobility and communication in elderly and disabled people

One of the aspects of disability that is most detrimental for well-being is difficulty with mobility. Access to transportation in the elderly is associated with higher life satisfaction (Liddle, Gustaffson and Bartlett, 2012). Policy measures can be taken to improve mobility, such as creating street and community environments that are accessible for wheelchair users, and providing free wheelchairs and hearing aids for members of socially disadvantaged groups. In the context of countries with high IT penetration, programs teaching Internet use to elderly people and providing them with inexpensive computers can be a useful initiative to prevent loneliness.

Promoting meaning

An important source of psychological meaning comes from an individual's cultural environment. People look to their culture for social values and goals, and some of these are adopted as personal values and guiding principles of behaviour. Today, mass media is a core element of the grand majority of cultural environments.

a. Providing meaningful occupations for the unemployed

Unemployed people have lower well-being and less opportunities and incentives to engage in meaningful activities (McKee-Ryan et al., 2005). Providing opportunities to engage in meaningful activities to unemployed individuals will prevent the long-term detrimental effects of unemployment on well-being (Lucas et al., 2004). Interventions that provide meaning and self-concept can be effective (Turner, Kessler and House, 1991; Vastamäki, Moser and Paul, 2009). Shared office spaces for unemployed people, for example, allows them to share projects, to have a structured time framework, and to create a sense of belongingness to a community.

b. Providing public social advertising emphasizing the values of altruism, care, positive relationships, self-improvement, personal growth, and health

Time spent watching TV in hedonic homeostasis, in order to pass the time, does not lead to increases in psychological well-being, unless it is associated with intrinsic goals and basic needs. For instance, there is evidence that the effects of television on cognitive development and academic achievement in children depend on the particular content in which it is viewed (Schmidt and Anderson, 2006). Television and social media that connect people and provide them more opportunities for personal growth (e.g., educational programs) have a positive impact on societal well-being. An example of a concrete public policy in the domain of mass media is the funding of public TV which provides informational and educational programs, rather than entertainment that lead to time spent without satisfaction and meaning.

Promoting autonomy

Autonomy can be promoted indirectly in two ways: firstly, by creating policies that provide people with more opportunities for choice in different domains of their lives, and, secondly, by removing unnecessary legal and social barriers and limitations. Examples of such policies in the domain of work can be found in the Time Use chapter. Because the range of possible policies is very vast and culturally-specific, we do not offer any specific suggestions here. However, all of the above suggested interventions only work in autonomy-supportive contexts – when they are implemented as proposed opportunities, rather than enforced necessities (Chirkov, Ryan and Sheldon, 2011).

Teaching the tools for psychological wellbeing

Positive education is defined as education for both traditional achievement skills and for well-being (Seligman et al., 2009). Schools usually teach children and adolescents the tools that they will need for accomplishment later in life. Positive education teaches these achievement skills, plus the skills that empower people to flourish. Founded on the claim that well-being is skill-based and can be taught (Seligman, 2002), positive education enhances students' well-being and behavior, increases engagement in the classroom, and teaches tools that a majority of parents value (Seligman et al., 2009). The Education chapter of this report discussed education for psychological well-being in more detail.

Case study on large-scale education: GNH Projects (Brazil)

Several municipalities (for example, Itapetininga) of the State of Sao Paolo have adopted community level GNH projects initiated by the Instituto Visão Futuro, a local NGO. The program provides training and workshops in yoga, meditation, self-knowledge, acting and clown techniques given to students at local schools who will then act as agents of change in the communities.

Over the past five years, five major GNH conferences have been held in every region of Brazil, including São Paulo and Sorocaba in the south, Brazilia in the West, in Rio de Janeiro during the Rio+20 events, and in Fortaleza, one of the largest and most rapidly developing cities in the northeast of Brazil. The mayor of Fortaleza has requested the Future Vision Institute to implement a GNH project in that city in 2013.

Barriers to implementation

Public investments in psychological well-being are likely to be controversial in many contexts. Firstly, from an economic and moral standpoint, financial resources channelled to policies aimed at increasing psychological well-being will meet resistance if they are not viewed to be an area that is appropriate for public sector activity, or if they come at the cost of other policies which primarily fall to the public sector, such as universal health care or education provision.

Furthermore, public policies aimed at impacting psychological well-being will be perceived by many as an infringement on individual freedom, a value that is considered sacred in various societies. A significant portion of society will have moral qualms about the government having any stake in individual psychological well-being. The role of the government, some claim, is to remove "unfreedoms," but psychological well-being, or what is traditionally referred to as happiness or the "pursuit of happiness," remains an individual endeavour (Sen 2000). When governments have a stake in psychological well-being,

totalitarian governments and servile societies might ensue, as they did in the Soviet Union and as they still do in other non-democratic societies around the world.

With respect to measures of psychological well-being as a yardstick to assess public policy, a strong barrier will be that the grand majority of these measures are subjective and "soft." Therefore, without the proper institutional infrastructure and transparency, they are subject to manipulation by corrupt governments that seek to amass and sustain power through real or falsely-reported re-elections.

Yet other barriers might stem from individuals who claim that once we start measuring psychological well-being, people will engage in the selfish pursuit of individual psychological well-being at the expense of others'. Just like the selfish pursuit of individual wealth has currently led to drastic economic inequality, the selfish pursuit of individual psychological well-being might lead to inequality in this domain, too.

Policy actions: How to build policy

Using psychological wellbeing indicators to inform public policy

Indicators of social progress are the drivers of public policy. Standard measures of progress need to be complemented with measures that better represent changes in quality of life (Helliwell, Layard and Sachs, 2012a; Layard, 2011; Stiglitz, Sen and Fitousi, 2010). Recently, leading scholars have proposed to judge policies by the changes they produce in people's subjective well-being (Diener et al., 2009). Psychological well-being can be reliably and objectively measured and related to the characteristics of an individual and a nation (Diener et al., 1985). Novel research has supported these claims, pointing out the need for using subjective indicators to complement standard economic measures in order to inform public policies (Diener et al., 2009; Helliwell, Layard and Sachs, 2012a). Asking people about their subjective states provides key information for policy makers and governments (Layard, 2011; Sachs, 2012). This method may help to align better the metric of traditional cost-benefits analysis with measures that truly represent the change in people's quality of live (Helliwell, Layard and Sachs, 2012a).

Well-known institutions have supported this idea. For example, the Stiglitz Commission (Stiglitz, Sen and Fitousi, 2010) recommended that the statistical offices of the world should "incorporate questions to capture people's life evaluations, hedonic experiences, and priorities in their own surveys" (p.18). In addition, on June 13th, 2011, a United Nations resolution invited Member States "to pursue the elaboration of additional measures that better capture the

importance of the pursuit of happiness and well-being in development with a view to guiding their public policies" (UN General Assembly Resolution A/65/L.86).

Therefore, in addition to standard measures of economic and social progress, governments should begin the systematic measurement of psychological well-being to inform public policies in order to lead societies to the most desirable states. By measuring psychological well-being at the same time as traditional economic variables, societies can assess its real progress, and not just its material living standards (Diener et al., 2009). The next section in this chapter, "Data and measurement for policy," has an extensive review of the best available indicators of psychological well-being.

To mirror the domains in the above "Major research findings of potential relevance to new public policy" section, below are recommendations on how to build policy in these six domains.

Social capital and trust

Economic growth may bring several benefits to the inhabitants of a country, especially to developed nations where most of the population live in poverty (Helliwell, Layard and Sachs, 2012a). However, we also know that systematic increases in GDP and globalization without the right policies to protect the people have contributed to generating detrimental effects on the quality of social relationships, to the weakening of a sense of community, and therefore negatively affecting people's well-being. Thus, it is extremely important to have the right account systems to monitor this trends and psychological well-being may be of great help (Stiglitz, Sen and Fitousi, 2010).

One way of monitoring these effects is through subjective measures of psychological wellbeing. If societies are evaluated only in terms of GDP, it will never be possible to understand completely how individuals and societies are performing. However, if we complement traditional indicators with happiness measures we can obtain a better picture. For instance, by using subjective measures, nations can understand the key associations between trust and social capital and fear, distrust, family infidelity and reduced social engagement. Therefore, subjective measures may help governments and policy makers to protect societies against undesirable states and improve the well-being of individual, families, communities and nations (Layard, Clark and Senik, 2012).

8.3. Moral debates

How can societies make legal decisions about morally controversial issues, such as prostitution, drugs, and gambling? Reasonable arguments can be made for and against these issues. However, the values of individuals or small groups are

always involved, which may raise several concerns regarding the appropriateness of the specific decisions and policies. In these cases, subjective indicators of preferences – which reflect people's own values and life goals – are a democratic and fair way to decide. By asking people directly, there is no need for external judgments, and this way may provide useful insights in order to decide on the most desirable actions for policy makers to follow (Diener et al., 2009).

8.4. Learning about the dangers of materialism

Research has revealed that higher materialism – a strong relative importance attached to material rewards – is associated with increases in individuals' mental disorders and with lower life satisfaction, vitality and positive emotions (Dittmar et al., 2012; Kasser and Ryan, 1993; 1996). These effects are especially dangerous for children below the age of 12 (Layard, Clark and Senik, 2012).

Learning about the downsides of materialism through psychological well-being measures may help governments construct better public policy (Diener et al., 2009). By complementing standard economic indicators with subjective measures of quality of life, governments may evaluate different policies to ameliorate the negative effects of strong material aspirations on people's well-being.

8.5. Externalities

Several public goods and services (e.g., better roads, day centers for the elderly, public squares, and parks) produce costs or benefits that are not easily captured through traditional economic and social indicators, but they may improve or diminish the citizens' quality of life substantially. Measuring cost and benefits through the change in people's psychological well-being may help policy makers to set up different options in order to mitigate the negative effects of externalities, and to allocate resources to the most convenient cost-effective alternative (Diener et al., 2009).

8.6. Unemployment

Standard economic measures regarding unemployment effects are incomplete as they focus solely on the loss of income. For example, reforms in the work place may lead to market efficiency and economic growth, but may also lead to lower job satisfaction and therefore to a reduction in psychological well-being (Stiglitz, Sen and Fitousi, 2010). However, incomplete traditional measures may be improved by complementing them with psychological well-being indicators. These measures may give us a more accurate picture of the problems associated with the job loss, thus advising policy makers about how to determine the best alternatives to help people recover from unemployment, both psychologically and economically. Studying peoples' judgments about their lives may give us important insights into the underlying process that regulates the association between well-being and unemployment, in order to create policies to protect

workers, their families and their communities from the negative effects of job loss (Diener et al., 2009).

8.7. Tax structures

Public policies need to pay attention to measures of psychological well-being when deciding on the most appropriate tax structures. These indicators may help policy makers to design optimal tax structures that enhance societal psychological well-being. The loss of well-being may be calibrated for different levels of taxation to find the taxation level that will maximize happiness and well-being in a nation. Using corresponding indicators may help governments collect taxes in an efficient manner while simultaneously supporting economic growth and equitable distributions (Diener et al., 2009).

Data and measurement for policy

Measuring individual psychological wellbeing

There is a considerable constellation of validated measurement tools for different domains of psychological well-being, which can be used to monitor, evaluate, and create public policy. The most important advantage of psychological well-being measures for advising public policies is the subjective nature of self-report instruments (Helliwell and Wang, 2012). Subjective questions allow people to talk about the quality of their own lives, reflecting their own histories, personalities and preferences. They reflect what people think is important and desirable, not what experts or governments think should define a good life. Basically, it is a direct personal judgment.

Subjective wellbeing (SWB)

The most widely used measure of life satisfaction is the brief 5-item Satisfaction with Life Scale (Diener et al., 1985). A number of measures of life satisfaction are available for specific populations, such as adolescents and elderly people.

Apart from life satisfaction, subjective well-being is also operationalized by measures of affect balance, such as the Positive and Negative Affect Schedule, or PANAS (Watson, Clark and Tellegen, 1985). This measure includes 20 words describing positive and negative emotional states that the respondent has to rate on a 5-point frequency scale during a specified time period (past day, past week, etc.). Elements of positive affect include joy, serenity, pride, awe, and love; elements of negative affect include sadness, guilt, fear, anger, nervousness, and anxiety.

General indicators of mental health

Unlike the above SWB scales that measure psychological well-being as a unipolar dimension, the scales in this group measure both the positive and negative dimension of psychological well-being. These measures include the

General Health Questionnaire (Goldberg and Williams, 2006), which has a 12-item version that was shown to be valid and reliable and more practical than longer versions (30- and 60-items). GHQ can be used in both clinical and non-clinical populations and has good predictive validity of the severity of psychiatric illness. The Warwick and Edinburgh Mental Well-being Scale (WEMWBS) is a fourteen-item measure designed to assess the most relevant dimensions of mental well-being and ill-being in the general population.

A wide range of measures of different aspects of psychological distress or ill-being are also available. Hundreds of brief and extended instruments exist for clinical and non-clinical populations to measure depression, anxiety, and other mental disorders. Given the relatively high incidence of depression compared to other mental illnesses and the comorbidity of depression and other psychopathologies, depression measures probably have the highest utility as indicators of psychological illness.

Case study on mental health: Suryani Institute for Mental Health (Indonesia)

"Over the past two decades, the Suryani Institute has been making mental health care more accessible in Bali, Indonesia, while redefining and expanding the definition of a "mental health care provider." Based on the simple premise that everyone can be a self-healer, the institute has engaged a multitude of groups, including teachers, women, children, volunteers, senior citizens, and health workers, and has taught them how to cope with psychiatric issues. Perhaps most notably, the institute has successfully begun to partner traditional healers with modern psychiatrists to provide a holistic experience that includes community-based prevention, treatment, and rehabilitation.

Using an innovative "biopyschospirit-sociocultural" approach to psychiatry, the institute combines meditation and spiritualism with modern psychological tools and practices. Local governments have adopted and replicated many of these methods (Lemelson, 2004; Suryani, Lesmana and Tiliopoulos, 2011).

Indicators of specific aspects of psychological wellbeing

These measures have a multi-domain approach, and they are more useful for theory-driven studies.

Some measures in this group tap into specific constructs that capture personality dispositions shown to be associated with or contribute to psychological well-being, such as hope (Hope Scale: Snyder et al., 1997) and hardiness (Personal Views Survey III-R: Maddi and Khoshaba, 2001). Other measures are based on specific theories of eudaemonic well-being; these measures of personal autonomy and self-determination (Deci and Ryan, 2004), curiosity and exploration (Kashdan, Rose and Fincham, 2004), and character

strengths and virtues (Peterson and Seligman, 2004). A range of measures exists that tap into different aspects of meaning, such as the Meaning in Life Questionnaire (Steger et al. 2006).

Integral measures that try to combine different constructs include Ryff's Psychological Well-being Scales (Ryff and Keyes, 1995) that encompass 6 distinct dimensions of wellness (Autonomy, Environmental Mastery, Personal Growth, Positive Relations with Others, Purpose in Life, Self-Acceptance) and have a range of versions, including 84-item, 54-item, and 18-item. The most recent measure tapping into the domains of Well-being Theory (Seligman 2011) is the PERMA Profile (PERMA-P) – Short Form, a 15-item measure of positive emotion, engagement, positive relationships, meaning, and achievement, or PERMA (Butler and Kern, in preparation).

Measuring psychological wellbeing at a national scale

In an important first attempt to measure psychological well-being at a national scale, Timothy So and Felicia Huppert (2009) of the University of Cambridge surveyed twenty-three European nations. Their definition of flourishing is in the spirit of Well-being Theory and PERMA, but without the objective measures to supplement the subjective measures. To flourish, an individual must have all the "core features" below and three of the five "additional features."

Core features:	Positive emotions
	Engagement, interest
	Meaning, purpose
Additional features:	Self-esteem
	Optimism
	Resilience
	Vitality
	Self-determination
	Positive relationships

They administered the following well-being items to more than 2000 adults in each of the nations below in order to find out how each nation was doing by way of its citizens' flourishing.

Positive emotion: Taking all things together, how happy would you say you are?
Engagement, interest: I love learning new things.
Meaning, purpose: I generally feel that what I do in my life is valuable and worthwhile.
Self-esteem: In general, I feel very positive about myself.

Optimism: I am always optimistic about my future.
Resilience: When things go wrong in my life it generally takes me a long time to get back to normal. (opposite answers indicate more resilience)
Positive relationships: There are people in my life who really care about me.

Denmark leads Europe with 33% of its citizens flourishing. The United Kingdom has about half that rate with 18% flourishing, and Russia sits at the bottom with only 6% of its citizens flourishing.
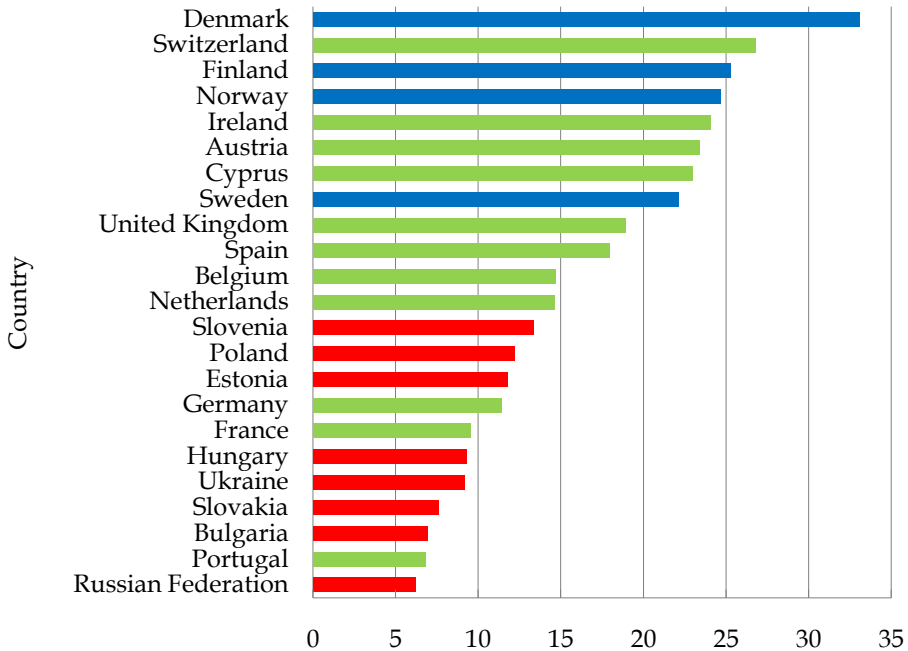
Figure 3. *Prevalence of flourishing across European countries participating in the European Social Survey 2006/7 (Percent meeting Criteria for flourishing)*

Monitoring

The essential step to monitoring psychological well-being is to include the above measures in measures of national welfare and progress. Increases in psychological well-being will be indicated by positive changes in the above scales (e.g., higher levels of PERMA and lower levels of depression). By collecting data on a recurring basis (e.g., once per year) from representative large samples of individuals using the scales from the previous section, longitudinal analyses will reveal changes in psychological well-being at a large social scale. The impact of public policies which target psychological well-being can be evaluated using these measurement tools.

Different analyses will reveal distinct facets of psychological well-being. Comparing overall psychological well-being internationally will reveal how countries are doing with respect to each other, with the above mentioned psychometric caveats with respect to responses to psychological well-being measures. Intra-nationally, longitudinal analyses will reveal how different domains of psychological wellbeing are changing over time. Cross-sectional analyses combined with longitudinal analyses will show differences in psychological wellbeing at a point in time and over time, with respect to age, gender, geography, race, religion, socioeconomic status, marital status, to name a few of the many variables along which psychological well-being can been analyzed.

Even though causality cannot be established unless formal randomized-controlled trials are designed to implement public policies, cross-sectional and longitudinal analyses can yield correlational relationships that approximate causation if data collection and analyses are robust enough. Results from these analyses can be used to identify successful and unsuccessful policies, and thus those that enhance psychological well-being can be replicated and amplified, and resources can be removed from those policies that do not have an impact. Psychometrically sound monitoring and evaluation will yield egalitarian increases in psychological well-being over time.

References

Aknin, L. B., Norton, M. I. and Dunn, E. W., 2009. From wealth to well-being? Money matters, but less than people think. *The Journal of Positive Psychology*, 4(6), 523–527.

Albanesi, C., Cicognani, E. and Zani, B., 2007. Sense of community, civic engagement and social well-being in Italian adolescents. *Journal of Community & Applied Social Psychology*, 17(5), 387-406.

Arc of the United States, and Wehmeyer, M. L., 1995. *The Arc's self-determination scale*, Selbstverl.

Aristotle, 1985. *Nicomachean ethics.* Translated by T. Irwin. Hackett, Indianapolis.

Baumeister, R. F. and Vohs, K. D. 2002. The pursuit of meaningfulness in life. In: S. J. Lopez and C. R. Snyder, eds. *Handbook of positive psychology*. New York: Oxford University Press. 608-618.

Bennett, K. M., 2002. Low level social engagement as a precursor of mortality among people in later life. *Age and Ageing*, 31(3), 165-168.

Bogg, T. and Roberts, B. W., 2004. Conscientiousness and health-related behaviours: a meta-analysis of the leading behavioural contributors to mortality. *Psychology Bulletin*, 130, 887-919.

Bolte, A., Goschke, T. and Kuhl, J., 2003. Emotion and intuition: effects of positive and negative mood on implicit judgments of semantic coherence. *Psychological Science,* 14, 416–421.

Bornstein, D., 2010. Fighting Bullying with Babies. *New York Times*, 8 November. viewed http://www.rootsofempathy.org/en/what-we-do/research.htmlv, David Bornstein. NY Times November 8, 2010.

Bradburn, N. M., 1969. *The Structure of Psychological Well-Being*. Chicago: Alpine.

Brand, S., Beck, J., Hatzinger, M., Harbaugh, A., Ruch, H. and Holsboer-Trachsler, E., 2010. Associations between satisfaction with life, burnout-related emotional and physical exhaustion, and sleep complaints. *World Journal of Biological Psychiatry*, 11(5), 744 – 754.

Butler, J., & Kern, M. L. (in preparation). The well-being theory questionnaire

Cacioppo, J. T., Hawkley, L. C. and Berntson, G. G., 2003. The anatomy of loneliness. *Current directions in psychological science*, 12(3), 71-74.

Chida, Y. and Steptoe, A., 2008. Positive psychological well-being and mortality: a quantitative review of prospective observational studies. *Psychosomatic Medicine*, 70(7), 741-756.

Chirkov, V. I., Ryan, R. M. and Sheldon, K. M. eds., 2011. *Human Autonomy in Cross-Cultural Context: Perspectives on the Psychology of Agency, Freedom, and Well-Being*. Dordrecht: Springer.

Cullis, J.G. and Lewis, A., 1997. Why people pay taxes: from a conventional economic model to a model of social convention. *Journal of economic psychology*, 18(2), 305-321.

Dambrun, M. and Ricard, M., 2011. Self-centeredness and selflessness: A theory of self-based psychological functioning and its consequences for happiness', *Review of General Psychology*, 15, 138–157.

Danner, D. D., Snowdon, D. A. and Friesen, W. V., 2001. Positive emotions in early life and longevity: findings from the nun study. *Journal of Personality and Social Psychology,* 80, 804 – 813.

Davern, M. T. Cummins, R. A. and Stokes, M. A., 2007. Subjective well-being as an affective-cognitive construct. *Journal of Happiness Studies*, 8(4), 429 – 449.

Deci, E. L. and Ryan R. M., 2000. The" what" and" why" of goal pursuits: human needs and the self-determination of behaviour. *Psychological inquiry*, 11(4), 227-268.

_____ 2004. *Handbook of self-determination research.* University Rochester Press.

Delle Fave, A., Massimini, F. and Bassi, M., 2011. Hedonism and eudaimonism in positive psychology. In: A. Delle Fave, ed. *Psychological Selection and Optimal Experience Across Cultures: Social Empowerment through Personal Growth*, 2, 3-18, New York: Springer.

Diener , E., Emmons , R. A., Larsen, R. J. and Griffin , S., 1985. The satisfaction with life scale. *Journal of Personality Assessment*, 49, 71-75.

Diener, E. and Seligman, M. E. P., 2004. Beyond money: toward an economy of well-being. *Psychological Science in the Public Interest, 5,* 1–31.

Diener, E., Larsen, R. J., Levine, S. A. and Emmons, R. A., 1985. Intensity and frequency: dimensions underlying positive and negative affect. *Journal of Personality and Social Psychology*, 48, 1253 - 1265.

Diener, E., Lucas, R., Schimmack, U. and Helliwell, J., 2009. *Well-being for public policy,* Oxford: Oxford University Press.

Diener, E., Nickerson, C., Lucas, R. E. and Sandvik, E., 2002. Dispositional affect and job outcomes. *Social Indicators Research,* 59, 229–259.

Diener, E., Oishi, S. and Lucas, R. E., 2003. Personality, culture, and subjective well-being: emotional and cognitive evaluations of life. *Annual Review of Psychology*, 54, 403 - 425.

Diener, E., Scollon, C. N. and Lucas, R. E., 2003. The evolving concept of subjective well-being: the multifaceted nature of happiness. In: P. T. Costa and I. C. Siegler, ed. *The psychology of aging*. New York: Elsevier Science.

Diener, E., & Seligman, M.E.P. (2002). Very happy people. *Psychological Science*, 13(1), 81-84

Diener, E., Suh, E. M., Lucas, R. E. and Smith, H. L., 1999. Subjective well-being: three Decades of Progress. *Psychological Bulletin*, 125(2), 276 - 302.

Dillon, K. M., Minchoff, B. and Baker, K. H., 1985. Positive emotional states and enhancement of the immune system. *International Journal of Psychiatry in Medicine*, 15, 13 - 18.

Dittmar, H., 2008. *Consumer culture, identity, and well-being: the search for the 'good life' and the 'body perfect'*. European Monographs in Social Psychology Series. Hove & New York: Psychology Press.

Dittmar, H., Bond, R., Kasser, T. and Hurst, M., 2012. The relationship between materialism and personal well-Being: a meta-analysis. *Manuscript submitted for publication.*

Dolan, P., 2008. Developing methods that really do value the 'Q'in the QALY'. *Health economics, policy and law*, 3(1), 69.

Dolan, P., Peasgood, T. and White, M., 2008. Do we really know what makes us happy? A review of the economic literature on the factors associated with subjective well-being. *Journal of Economic Psychology*, 29(1), 94-122.

Dunn, E. W., Aknin, L. B. and Norton, M. I., 2008. Spending money on others promotes happiness. *Science*, 319(5870), 687–1688.

Dunn, E. W., Gilbert, D. T. and Wilson, T. D., 2011. If money doesn't make you happy, then you probably aren't spending it right. *Journal of Consumer Psychology*, 21(2), 115.

Easterlin, R. A., 2001. Income and happiness: towards a unified theory. *Economic Journal* 111, 465-84.

Emmons, R. A., 2003. Personal goals, life meaning, and virtue: wellsprings of a positive life. *Flourishing: Positive psychology and the life well-lived*, 105-128.

Estrada, C. A., Isen, A. M. and Young, M. J., 1994. Positive affect improves creative problem solving and influences reported source of practice satisfaction in physicians. *Motivation and Emotion.*

Forgeard, M. J. C., Jayawickreme, E., Kern, M. L. and Seligman, M. E. P., 2011. Doing the right thing: Measuring well-being for public policy. *International Journal of Well-being*, 1, 79–106.

Fredrickson, B. L. and Branigan, C., 2005. Positive emotions broaden the scope of attention and thought-action repertoires. *Cognition & Emotion,* 19, 313–332.

Fredrickson, B. L. and Joiner, T., 2002. Positive emotions trigger upward spirals toward emotional well-being. *Psychological Science*, 13, 172-175.

Fredrickson, B. L., 1998. What good are positive emotions? *Review of General Psychiatry,* 2, 300–319.

Fredrickson, B. L., Cohn, M. A., Coffey, K. A., Pek, J. and Finkel, S. M., 2008. Open hearts build lives: positive emotions, induced through loving-kindness meditation, build consequential personal resources. *Journal of personality and social psychology*, *95 (*5), 1045.

Fredrickson, B., 2013. *Love 2.0: how our supreme emotion affects everything we feel, think, do, and become*, Hudson Street Press.

Froh, J. J., Yurkewicz, C. and Kashdan, T. B., 2009. Gratitude and subjective well-being in early adolescence: examining gender differences. *Journal of Adolescence*, 32, 633-650.

Fromm, E., 1976. *To have or to be?* New York: Continuum.

Fry, P. S. and Debats, D. L., 2009. Perfectionism and the five-factor personality traits as predictors of mortality in older adults. *Journal of Health and Psychology*, 14, 513-524.

Gagné, M., 2003. The role of autonomy support and autonomy orientation in prosocial behavior engagement. *Motivation and Emotion,* 27(3), 199-223.

Glass, T. A., De Leon, C. F. M., Bassuk, S. S. and Berkman, L. F., 2006. Social engagement and depressive symptoms in late life longitudinal findings. *Journal of Aging and Health*, 18(4), 604-628.

Goldberg, D. and Williams, P., 2006. *General health questionnaire*. GL Assessment.

Green, F., 2011. Unpacking the misery multiplier: how employability modifies the impacts of unemployment and job insecurity on life satisfaction and mental health. *Journal of health economics*, 30(2), 265-276.

Greenfield, E. A. and Marks, N. F., 2004. Formal volunteering as a protective factor for older adults' psychological well-being. *The Journals of Gerontology Series B: Psychological Sciences and Social Sciences*, 59(5), S258-S264.

Haar, J. and Roche, M., 2010. Family supportive organisation perceptions and employee outcomes: the mediating effects of life satisfaction. *International Journal of Human Resource Management*, 21(7), 999 - 1014.

Hamre, B. K. and Pianta, R. C., 2001. Early teacher-child relationships and the trajectory of children's school outcomes through eighth grade. *Child Development*, 72, 625-638.

Helliwell, J. F. and Huang, H., 2011. Well-being and trust in the workplace. *Journal of Happiness Studies*, 12(5), 747-767.

Helliwell, J. F. and Wang, S., 2012. The state of world happiness. In: J. F. Helliwell, R. Layard and J. Sachs, eds. *World Happiness Report*. New York: The Earth Institute, Columbia University.

Helliwell, J. F., Layard, R. and Sachs, J. eds., 2012a. *World Happiness Report*. New York: The Earth Institute, Columbia University.

_____ 2012b. Some policy implications. In: J. F. Helliwell, R. Layard and J. Sachs, eds. *World Happiness Report*. New York: The Earth Institute, Columbia University.

Howell, R., Kern, M. L. and Lyubomirsky, S., 2007. Health benefits: meta-analytically determining the impact of well-being on objective health outcomes. *Health Psychology Review*, 1, 83-136.

Hoyt, L. T., Chase-Lansdale, P. L., McDade, T. W. and Adam, E. K., 2012. Positive youth, healthy adults: does positive well-being in adolescence predict better perceived health and fewer risky health behaviours in young adulthood? *Journal of Adolescent Health*, 50, 66-73.

Huta, V. and Ryan, R. M., 2010. Pursuing pleasure or virtue: the differential and overlapping well-being benefits of hedonic and eudaimonic motives. *Journal of Happiness Studies*, 11(6), 735-762.

Huxley, A., 1932. *Brave new world.* New York: Harper & Brothers.

Isen, A. M., Daubman, K. A. and Nowicki, G. P., 1987. Positive affect facilitates creative problem solving. *Journal of Personality and Social Psychology,* 52, 1122–1131.

Isen, A. M., Rosenzweig, A. S. and Young, M. J., 1991. The influence of positive affect on clinical problem solving. *Medical Decision Making,* 11, 221–227.

Johnson, K. J. and Fredrickson, B. L., 2005. 'We all look the same to me': positive emotions eliminate the own-race bias in face recognition. *Psychological Science,* 16, 875–881.

Kahneman, D. and Deaton, A., 2010. High income improves evaluation of life but not emotional well-being. *Proceedings of the National Academy of Sciences*, 107(38), 16489-16493.

Kahneman, D. Kahneman, D. and Tversky, A., 2003. Experienced utility and objective happiness: a moment-based approach. *The psychology of economic decisions*, 1, 187-208.

Kashdan, T. B., Biswas-Diener, R. and King, L. A., 2008. Reconsidering happiness: the costs of distinguishing between hedonics and eudaimonia. *The Journal of Positive Psychology*, 3(4), 219-233.

Kashdan, T. B., Rose, P. and Fincham, F. D., 2004. Curiosity and exploration: facilitating positive subjective experiences and personal growth opportunities. *Journal of Personality Assessment*, 82(3), 291-305.

Kasser, T. and Kanner, A. D., 2004. *Psychology and consumer culture: the struggle for a good life in a materialistic world*. Washington, DC: APA.

Kasser, T. and Ryan, R. M., 1993. A dark side of the American dream: correlates of financial success as a central life aspiration. *Journal of Personality and Social Psychology*, 65, 410-422. doi: 10.1037/0022-3514.65.2.410

_____ 1996. Further examining the American dream: differential correlates of intrinsic and extrinsic goals. *Personality and Social Psychology Bulletin,* 22, 280-287. doi: 10.1177/0146167296223006

Kaufman, M., 2005. 'Interview of Richard Davidson' in the *Washington Post*.

Kern, M. L. and Friedman, H. S., 2008. Do conscientious individuals live longer? A quantitative review. *Health Psychology*, 27, 505-512.

Keyes, C. L. and Annas, J., 2009. Feeling good and functioning well: distinctive concepts in ancient philosophy and contemporary science. *The Journal of Positive Psychology*, 4(3), 197-201.

Kimmel, D. C., Price, K. F. and Walker, J. W., 1978. Retirement choice and retirement satisfaction. *Journal of Gerontology*, 33(4), 575-585.

Kok, B. E. and Fredrickson, B. L., 2010. Upward spirals of the heart: autonomic flexibility, as indexed by vagal tone, reciprocally and prospectively predicts positive emotions and social connectedness. *Biological psychology*, 85(3), 432–436.

Kopperud, K. H. and Vitterso, J., 2008. Distinctions between hedonic and eudaimonic well-being: results from a day reconstruction study among Norwegian jobholders. *Journal of Positive Psychology*, 3, 174-81

Kuhl, J., 1983. Emotion, cognition, and motivation: II. The functional significance of emotions in perception, memory, problem-solving, and overt action. *Sprache & Kognition*, 2, 228–253.

_____ 2000. A functional-design approach to motivation and self-regulation: the dynamics of personality systems interactions. In: M. Boekaerts, P. R.

Pintrich and M. Zeidner, eds. *Handbook of self-regulation.* San Diego: Academic Press. 111–169.

Kuo, F. E., Sullivan, W. C., Coley, R. L. and Brunson, L., 1998. Fertile ground for community: inner-city neighbourhood common spaces. *American Journal of Community Psychology*, 26(6), 823-851.

Layard, R., 2005. *Happiness: Lessons from a New Science*. New York: Penguin Press.

_____ 2011. *Happiness: Lessons from a New Science*. 2nd edn. New York: The Penguin Press.

Layard, R., Clark, A. and Senik, C., 2012. The causes of happiness and misery. In: J. F. Helliwell, R. Layard and J. Sachs, eds. *World Happiness Report*. New York: The Earth Institute, Columbia University.

Lemelson, R. B., 2004. Traditional healing and its discontents: efficacy and traditional therapies of neuropsychiatric disorders in Bali. *Medical anthropology quarterly*, 18(1), 48-76.

Liddle, J., Gustaffson, L. and Bartlett, H., 2012. Time use, role participation and life satisfaction of older people: Impact of driving status. *Australian Occupational Therapy Journal*, 59(5), 384-392.

Lucas, R. E., 1996. Nobel lecture: monetary neutrality. *Journal of Political Economy*, 104, 661 - 682.

Lucas, R. E., Clark, A. E., Georgellis, Y. and Diener, E., 2004. Unemployment alters the set point for life satisfaction. *Psychological Science*, 15(1), 8-13.

Lucas, R. E., Diener, E., & Suh, E. (*1996*). Discriminant validity of well-being measures. *Journal of Personality and Social Psychology*, 71, 616-628

Luechinger, S. and Raschky, P. A., 2009. Valuing flood disasters using the life satisfaction approach. *Journal of Public Economics,* 93(3), 620-633.

Lutz, A., Greischar, L. L., Rawlings, N. B., Ricard, M. and Davidson, R. J., 2004. Long-term meditators self-induce high-amplitude gamma synchrony during mental practice. *Proceedings of the National Academy of Sciences of the United States of America*, 101(46), 16369.

Lyubomirsky, S. and Lepper, H. S., 1999. A measure of subjective happiness: preliminary reliability and construct validation. *Social Indicators Research*, 46, 137 - 155.

Lyubomirsky, S., King, L. A. and Diener, E., 2005. The benefits of frequent positive affect: does happiness lead to success? *Psychology Bulletin*, 131, 803-855.

Maddi, S. R., & Khoshaba, D. M. (2001). Personal Views Survey. *Journal of Personality Assessment*, 63, 265–274

McKee-Ryan, F., Song, Z., Wanberg, C. R. and Kinicki, A. J., 2005. Psychological and physical well-being during unemployment: a meta-analytic study. *Journal of Applied Psychology*, 90(1), 53-76.

Meier, S. And Stutzer, A., *2008*. Is volunteering rewarding in itself?, *Economica, London School of Economics and Political Science*, 75(297), 39-59

Millette, V. and Gagné, M., 2008. Designing volunteers' tasks to maximize motivation, satisfaction and performance: the impact of job characteristics on volunteer engagement. *Motivation and Emotion*, 32 (1), 11-22.

Morrow-Howell, N., 2000. *Productive engagement of older adults: effects on well-being*. St. Louis: Center of Social Development, Washington University.

Morrow-Howell, N., Hinterlong, J., Rozario, P. A. and Tang, F., 2003. Effects of volunteering on the well-being of older adults. *The Journals of Gerontology Series B: Psychological Sciences and Social Sciences*, 58 (3), S137-S145.

Myers, D. G., 2000. *The American Paradox: Spiritual Hunger in an Age of Plenty*. Yale University Press.

Norton, D. L., 1976. *Personal Destinies*. Princeton: Princeton University Press.

OECD, 2011. *OECD better life initiative*. *Compendium of OECD well-being indicators*. Organization of Economic Co-Operation and Development.

_____ 2013. *OECD Guidelines on Measuring Subjective Well-being*. OECD Publishing. http://dx.doi.org/10.1787/9789264191655-en

Oerlemans, W. G. M., Bakker, A. B. and Veenhoven, R., 2011. Finding the key to happy aging: A day reconstruction study of happiness. *Journal of Gerontology Series B: Psychological Sciences and Social Sciences*, doi:10.1093/geronb/gbr040.

Ostir, G. V., Markides, K. S., Black, S. A. and Goodwin, J. S., 2000. Emotional well-being predicts subsequent functional independence and survival. *Journal of the American Geriatrics Society*, 48, 473 - 478.

Perelman, A. M., Miller, S. L., Clements, C. B., Rodriguez, A., Allen, K. and Cavanaugh, R., 2012. Meditation in a deep south prison: a longitudinal study of the effects of Vipassana. *Journal of Offender Rehabilitation*, 51(3), 176-198.

Peterson, Christopher & Seligman, M.E.P. (2004). *Character strengths and virtues a handbook and classification*. Washington, D.C.: APA Press and Oxford University Press.

Powdthavee, N., 2008. Putting a price tag on friends, relatives, and neighbours: Using surveys of life satisfaction to value social relationships. *Journal of Socio-economics*, 37(4), 1459-1480.

Power, M. and Kuyken, W., 1998. The World Health Organisation Quality of Life Assessment (WHOQOL) - Development and general psychometric properties. *Social Science and Medicine*, 46(12), 1569-1585.

Pressman, S. D. and Cohen, S., 2005. Does positive affect influence health?. *Psychology Bulletin*, 131, 925-971.

Roberts, B. W., Kuncel, N. R., Shiner, R., Caspi, A. and Goldberg, L. R., 2007. The power of personality: the comparative validity of personality traits, socioeconomic status, and cognitive ability for predicting important life outcomes. *Perspectives on Psychological Science*, 2, 313-345.

Robinson, D. N., 1989. *Aristotle's Psychology*. New York: Columbia University Press.

Rothwell, N. A., Britton, P. G. and Woods, R. T., 1983. The effects of group living in a residential home for the elderly. *British Journal of Social Work*, 13(1), 639-643.

Rowe, G., Hirsh, J. B., Anderson, A. K. and Smith, E. E., 2007. Positive affect increases the breadth of attentional selection. *PNAS Proceedings of the National Academy of Sciences of the United States of America*, 104, 383–388.

Ryan, R. M. and Deci, E. L., 2000. Self-determination theory and the facilitation of intrinsic motivation, social development, and well-being. *American Psychologist*, 55(1), 68 - 78.

_____ 2001. On happiness and human potentials: a review of research on hedonic and eudaimonic well-being. *Annual Review of Psychology*, 141–166.

Ryan, R. M. and Huta, V., 2009. Wellness as healthy functioning or wellness as happiness: The importance of eudaimonic thinking (response to the Kashdan et al. and Waterman discussion). *The Journal of Positive Psychology*, 4(3), 202-204.

Ryan, R. M., Huta, V. and Deci, E. L., 2008. Living well: a self-determination theory perspective on eudaimonia. *Journal of Happiness Studies*, 9(1), 139-170.

Ryff, C. D. and Keyes, C. L. M., 1995. The structure of psychological well-being revisited. *Journal of Personality and Social Psychology,* 69, 719–27

Sachs, J., 2012. Introduction. In: J. F. Helliwell, R. Layard and J. Sachs, eds. *World Happiness Report*. New York: The Earth Institute, Columbia University.

Salovey, P., Rothman, A. J., Detweiler, J. B. and Steward, W. T., 2000. Emotional states and physical health. *American Psychologist*, 55, 110-121.

Schmidt, M. E. and Anderson, D. R., 2006. The impact of television on cognitive development and educational achievement. *Children and television: Fifty years of research*, 65-84.

Segerstrom, S. C., 2007. Optimism and resources: effects on each other and health over 10 years. *Journal of Research in Personality*, 41, 772-786.

Seligman, M. E. P. and Csikszentmihalyi, M., 2000. Positive psychology: an introduction. *American Psychologist,* 55, 5-14.

Seligman, M. E. P., 2002. *Authentic happiness: using the new positive psychology to realize your potential for lasting fulfilment*. New York: Free Press.

Seligman, M. E. P., Ernst, R. M., Gillham, J., Reivich, K. and Linkins, M., 2009. Positive education: positive psychology and classroom interventions. *Oxford Review of Education*, 35, 293–311.

Seligman, M., 2011. *Flourish*. New York: Simon & Schuster.

Sen, A., 2000. A decade of human development. *Journal of Human Development,* 1, 17–23.

Shen, B. J., McCreary, C. P. and Myers, H. F., 2004. Independent and mediated contributions of personality, coping, social support, and depressive symptoms to physical functioning outcomes among patients in cardiac rehabilitation. *Journal of Behavioral Medicine,* 27, 39-62.

Shernoff, D. J., Csikszentmihalyi, M., Schneider, B. and Shernoff, E. S., 2003. Student engagement in high school classrooms from the perspective of flow theory. *School Psychology Quarterly,* 18(2), 158–176.

Shmotkin, D., Blumstein, T. and Modan, B. 2003. Beyond keeping active: Concomitants of being a volunteer in old-old age. *Psychology and aging*, 18(3), 602.

Simpson, S., Woods, R. and Britton, P., 1981. Depression and engagement in a residential home for the elderly. *Behaviour research and therapy*, 19(5), 435-438.

Skjaeveland, O. and Garling, T., 1997. Effects of interactional space on neighbouring. *Journal of Environmental Psychology*, 17(3), 181-198.

Snyder, C. R., Hoza, B., Pelham, W. E., Rapoff, M., Ware, L. and Danovsky, M., 1997. The development and validation of the Children's Hope Scale. *Journal of Pediatric Psychology*, 22, 399-421.

Snyder, C. R., Sympson, S. C., Ybasco, F. C., Borders, T. F., Babyak, M. A. and Higgins, R. L., 1996. Development and validation of the State Hope Scale. *Journal of Personality and Social Psychology,* 70(2), 321-335.

So, T. and Huppert, F., 2009. What percentage of people in Europe are flourishing and what characterizes them? *Prepared for the OECD/ISQOLS meeting Measuring subjective well-being: An opportunity for NSO's?*, Florence, Italy, July 23-24, 2009. Retrieved October 19, 2009, from http://www.isqols2009.istitutodeglinnocenti.it/Content_en/Huppert.pdf

Steger, M. F., Frazier, P., Oishi, S. and Kaler, M., 2006. The meaning in life questionnaire: Assessing the presence of and search for meaning in life. *Journal of Counseling Psychology*, 53(1), 80-93.

Stiglitz, J. E., 1988. *Pareto efficient and optimal taxation and the new new welfare economics*.

Stiglitz, J. E., Sen, A. and Fitousi, J., 2010. *Mismeasuring Our Lives: Why GDP Doesn't Add Up*, New York: N.Y., New Press

Stone, A. and Shiffman, S., 1994. Ecological Momentary Assessment (EMA) in Behavioral Medicine. *Annals of Behavioural Medicine*, 16, 199-202.

Suryani, L. K., Lesmana, C. B. and Tiliopoulos, N., 2011. Treating the untreated: applying a community-based, culturally sensitive psychiatric intervention to confined and physically restrained mentally ill individuals in Bali, Indonesia. *Eur Arch Psychiatry Clin Neurosci*.

Tadic, M., Oerlemans, W. G. M., Bakker, A. B. and Veenhoven, R., (in press). Daily Activities and Happiness in Later Life: The Role of Work Status. *J Happiness Stud*. DOI 10.1007/s10902-012-9392-9

Taylor, S. E., 2007. Social support. In: H. S. Friedman and R. C. Silva, eds. *Foundation of health psychology*. New York: Oxford University Press. 145-171.

Thoits, P. A. and Hewitt, L. N., 2001. Volunteer work and well-being. *Journal of Health and Social Behaviour*, 115-131.

Turner, J. B., Kessler, R. C. and House, J. S., 1991. Factors facilitating adjustment to unemployment: implications for intervention. *American Journal of Community Psychology*, 19(4), 521-542.

Turner, R. J., 1981. Social support as a contingency in psychological well-being. *Journal of Health and Social Behaviour*, 357-367.

UN General Assembly Resolution A/65/L.86, 13 July 2011.

Van Praag, B. and Baarsma, B. E., 2004. Using Happiness Surveys to Value Intangibles: The Case of Airport Noise*. *The Economic Journal*, 115(500), 224-246.

Vastamäki, J., Moser, K. and Paul, K. I., 2009. How stable is sense of coherence? Changes following an intervention for unemployed individuals. *Scandinavian Journal of Psychology*, 50(2), 161-171.

Veenhoven, R., 1994. Is happiness a trait? Tests of the theory that a better society does not make people any happier. *Social Indicators Research*, 32, 101-160.

Vitterso, J., Overwien, P. and Martinsen, E., 2009. Pleasure and interest are differentially affected by replaying versus analyzing a happy life moment. *The Journal of Positive Psychology*, 4(1), 14-20.

Waterman, A. S., 2008. Reconsidering happiness: a eudaimonist's perspective. *The Journal of Positive Psychology*, 3(4), 234-252.

Watson, D., Clark, L. A. and Tellegen, A., 1988. Development and validation of brief measures of positive and negative affect: The PANAS scales. *Journal of Personality and Social Psychology*, 54, 1063–1070.

Weinstein, N. and Ryan, R. M., 2010. When helping helps: autonomous motivation for prosocial behaviour and its influence on well-being for the helper and recipient. *Journal of personality and social psychology*, 98(2), 222.

Williams, S. and Shiaw, W. T., 1999. Mood and organizational citizenship behavior: the effects of positive affect on employee organizational citizenship behavior intentions. *Journal of Psychology*, 133, 656-668.

Windsor, T. D., Anstey, K. J. and Rodgers, B., 2008. Volunteering and psychological well-being among young-old adults: how much is too much? *The Gerontologist*, 48(1), 59-70.

Chapter 8: Altruism and Happiness

— Matthieu Ricard

"Every person I have known who has been truly happy, has learned how to serve others."

~ Albert Schweitzer

This paper will first explain the close connection between altruism and happiness and then consider the scientific evidence pointing out the interdependence of these two important aspects of human society.

Why happiness cannot be separated from altruism

Modern life confronts us with a number of unique challenges, each with its own temporality and priority. We can view them as three different categories based on preoccupations and time scales: the economy in the short-term, life satisfaction in the mid-term, and the environment in the long-term.

Stock markets soar and crash overnight; the economy and financial world are evolving at an ever-faster pace. Life satisfaction is measured by a life project, a career, a family, or a generation. The evolution of the environment is measured by a century, millennium, or era, even though ecological upheavals are accelerating the rhythm of these changes. We are now in the era called "anthropocene", the first era where humans have a global impact on the earth's ecosystem.

How can we work with these three time scales simultaneously? How do we reconcile them? We know how difficult it is to change our habits. Investors are not prepared to put their money in treasury bonds that will only mature in 100 years. Those who are well off don't feel like sacrificing their lifestyle for the benefit of others, much less for the sake of future generations. Those who live in need naturally aspire to more prosperity and economic growth in order to better their own situation and catch up with the richest nations. Those who profit the most from exploiting natural resources do not want to minimize their earnings. Individualism keeps us from adopting a global vision of these problems, from drawing the necessary conclusions, and from implementing the corresponding measures.

There is, however, a vital thread that links these three time scales and harmonizes their priorities - Altruism. Altruism is not just a noble, somewhat

naive ideal or a luxury only the affluent can afford. Now, more than ever, altruism is a necessity for the wellbeing of all.

If we were more altruistic, if we were more considerate of others, we would not indulge in wild speculations with the savings of investors who placed their trust in us.

If we were more considerate of the quality of life of those around us, we would make sure that working conditions, family life, and many other aspects of society were improved.

Finally, if we were more considerate of future generations, we would not blindly sacrifice the environment they are inheriting from us in favor of our short-lived wants and needs.

Altruism is a factor that will determine the quality of the current and future existence of all. It must not be regarded only as a utopian thought created by a few individuals with big hearts. We must have the insight to recognize its essential role and have the audacity to say so.

Economists have based their theories on the assumption that human beings exclusively follow their own personal interests. Although this hypothesis is mistaken, it is the foundation of the current economic systems. They are based on the principle of free exchange of goods and services as posited by Adam Smith. They neglect to take into account the need for each individual to care for the wellbeing of others. This omission created a society that cannot function harmoniously. Adam Smith himself wrote about this need in his *The Theory of Moral Sentiments,* a work that is often overlooked by economists: "To restrain our selfish, and to indulge our benevolent affections, constitutes the perfection of human nature; and can alone produce among mankind that harmony of sentiments and passions in which consists their whole grace and propriety" (Smith 1759). Modern economists are now increasingly calling for acknowledging the role altruistic propensities in every aspects of human life, including economy. For example, Dennis Snower the founder of the GES (Global Economic Symposium) has stressed that along the "voice of reason," economists, politician, and individuals alike must now also speak with the "voice of care" (Snower 2012).

Evolutionists also remind us that we should not forget the emphasis placed by Darwin on the vital importance of cooperation in the world of living beings. Martin Nowak, among others, reminds us: "Cooperation is the architect of creativity throughout evolution, from cells to multicellular creatures to anthills to villages to cities. Without cooperation there can be neither construction nor

complexity in evolution. Cooperation—not competition—underpins innovation." (Nowak 2011)

Exploring altruism

Altruism can be defined as, "The wish and determination to attain the well-being of others." As far as possible, this state of mind will lead to behavior that strives to realize this objective. Altruism can be considered to be authentic only if achieving somebody else's wellbeing is the primary motivation and the ultimate aim of a particular behavior.

"Goodness is not a doctrine or a principle. It is a way of living," wrote historian Phillip Hallie (Hallie 1978). Altruism can be a momentary state of mind, or grow into a lasting way of being. In its essence, altruism is a benevolent state of mind that is fueled by the feeling of concern for the fate of all those around us and wishing them well strengthened by our determination to act accordingly.

The link with happiness is obvious. In Buddhism *altruistic love* is defined as "the wish that all beings find happiness and the causes of happiness." These altruistic wishes must be accompanied by a determination to do everything in our power to make them come true. This determination will drive the activity, but it must be enlightened and empowered by discernment and wisdom.

Compassion is the form altruistic love takes when it is confronted with suffering. Buddhism defines compassion as "the wish that all beings be freed from suffering and its causes."

Empathy is the *capacity to enter into resonance with the other person*, to resonate with his feelings and become aware of his situation. The word empathy is a translation of the German word *Einfühlung*, which means, 'to feel in'. Psychologist Edward Tichtener used the term for the first time in English at the beginning of the 20th century. Empathy happens spontaneously when we witness other people's situations and their emotions as manifested by their facial expressions, looks, the sound of their voices, and their behavior. Empathy conveys to us the nature and the intensity of their suffering. We may consider it as the catalyst that transforms altruistic love into compassion. There are different modalities of empathy, some are emotional, others cognitive.

Psychologist Daniel Batson, one of the most eminent contemporary specialists in altruism, distinguishes up to eight kinds of empathy (Batson, C.D. 2009). In order to be altruistically concerned by another person's situation, we have to begin by adopting their point of view. Philosopher Jean-Jacques Rousseau wrote, "The rich person has only a little compassion for the poor because he

cannot imagine himself to be poor." The next step is to *value others* since it is not enough to merely imagine oneself in someone else's place or feel what they feel. *Sympathetic joy* consists of celebrating and rejoicing from the bottom of one's heart in the achievements and virtues of someone else, or in people who shower humanity with good deeds and whose beneficial projects have been successful.

Impartiality is another essential component of altruism. The wish that all beings be delivered from suffering must not depend on our personal biases or on the way others treat us. Impartiality is exemplified by the mindset of a compassionate physician who rejoices when others are in good health and who is concerned with the healing of all sick people, whomever they may be, without being influenced by moral judgments and personal preferences.

Biological altruism is inherited from evolution. It is based on parental care and is inherent to our nature and needs no instruction. But it is limited and partial since it depends on our ties of kinship or on the way others behaved towards us. It is extended to strangers with difficulty, and even more so to enemies. Conversely, extended altruism that is directed to all beings is free from such bias. However, for most of us, this is not instinctive and requires some instruction and training. Though it is based on biological altruism, it transcends its limits.

Momentary states of mind and durable dispositions

Psychologist Daniel Batson defines altruism as: "a motivational state with the ultimate goal of increasing another's welfare. Altruism can be juxtaposed to egoism, which is a motivational state with the ultimate goal of increasing one's own welfare." (Batson 2011) For Batson, altruism is not so much a way of being as a motivational force oriented towards a goal that disappears once the goal has been achieved. He prefers to speak of altruism rather than of altruists because the same person may have an altruistic motivation at one moment and an egotistic motivation at another moment or with regard to another person.

It seems appropriate, however, to speak also of altruistic or egotistic *dispositions*, depending on the mindsets habitually prevalent in a person in varying degrees between genuine altruism and blind egoism.

Such an inner disposition seems to go together with a particular world vision. According to Kristen Monroe of Irvin University, "Altruists simply have a different way of seeing things. Where the rest of us see a stranger, altruists see a fellow human being. While many disparate factors may contribute to the existence and development of what I will identify as an altruistic perspective, it is the perspective itself that constitutes the heart of altruism." (Monroe 2009)

Fundamentally, to the extent that altruism permeates our mind, it will express itself as soon as it is faced with another's need, be it a need for help, care, or affection. As stated by philosopher Charles Taylor, "Much contemporary moral philosophy … has focused on what is right to do rather than on what is good to be." (Taylor 1989) This way of seeing things puts altruism in a more vast perspective and allows the possibility of *cultivating* it as a *way of being*.

Altruism and happiness: A win-win or a lose-lose situation

According to Buddhism, there is a direct relationship between altruism and happiness. Joy and satisfaction are closely tied to love and affection. Misery, on the contrary, goes hand in hand with selfishness and hostility. Altruistic love and compassion are attuned to reality insofar as they recognize and appreciate the interdependent nature of all beings. This naturally brings more empathic concern for others (Batson 2011) through the recognition that we are all the same in wanting to avoid suffering (Dalai Lama 1999). As they are attuned to reality, altruistic love and compassion are "functional". Someone who sees phenomena as interdependent cultivates compassion and then acts accordingly, will feel a sense of harmony. This is a win-win situation.

The research in neuroscience and psychology also indicates that loving-kindness and compassion are among the most positive of all positive emotions or mental states. As Barbara Fredrickson, a pioneer from the University of Maryland in the field of positive psychology, writes about altruistic love, which she defines as "positive resonance":

> I want to emphasize, though, that love isn't simply one of the many positive emotions that sweep through you from time to time. It's bigger than joy, amusement, gratitude, or hope. It has special status. I call it our supreme emotion. First, that's because any of the other positive emotions – joy, amusement, gratitude, hope, and so on – can be transformed into an instance of love when felt in close connection with another. Yet casting love as shared positive emotion doesn't go nearly far enough.

> Second, whereas all positive emotions provide benefits – each, after all, broadens your mindset and builds your resourcefulness – the benefits of love run far deeper, perhaps exponentially so. Love is our supreme emotion that makes us come most fully alive and feel most fully human. It is perhaps the most essential emotional experience for thriving and health. (Fredrickson 2013)

At the opposite end, a selfish individual who has little regard for another's welfare and is primarily, or even exclusively, concerned with the pursuit of his

personal interest as an ultimate goal will consider others as a tools to achieving his own wellbeing. The problem is that such a person will usually fail to achieve both his own happiness and that of others.

Psychologist Michael Dambrun and myself (Dambrun and Ricard 2011) have argued that lasting happiness is associated with selflessness rather than self-centeredness. The scientific literature reviewed by these two authors indicates that highly self-centered people are more focused on enjoying hedonic pleasure than on cultivating eudemonic happiness and that, consequently, only a fluctuating well-being will result. Conversely, people who reduce their self-centered tendencies seem to enjoy the quality of a life filled with inner peace, fulfillment, and serenity, as opposed to a life filled with inner conflicts and afflictions.

There are two reasons for this. First, on an emotional level, selfishness is not a pleasant state of mind. By attempting to build happiness within the bubble of self-centeredness while considering that the happiness of others is not our job, we usually makes ourselves miserable while making everyone around us miserable as well. Being constantly centered on yourself leads to endless ruminations and hopes and fears that are detrimental to well-being. As the French writer Romain Rolland said, "If the only goal of your life is selfish happiness, your life will soon be without any goal." (Rolland 1952) It is a lose-lose situation.

Second, such an attempt - "I will built up my happiness on my side; take care of yours: it's none of my business" - is by nature dysfunctional since it assumes that the world is made of separate entities which is not the case. All beings and phenomena are by nature interdependent. This was also the view expressed by Einstein: "A human being is part of a whole, called by us the 'Universe,' a part limited in time and space. He experiences himself, his thoughts and feelings, as something separated from the rest - a kind of optical delusion of his consciousness. The striving to free oneself from this delusion is in the one issue of true religion. Not to nourish the delusion but to try to overcome it is the way to reach the attainable measure of peace of mind." (Einstein 1950)

The twofold accomplishment of the happiness of others and of one's own

People often claim that to be truly altruistic an action must imply a "sacrifice" for oneself. One should keep in mind however that what seems like a sacrifice for someone else, might be experienced as deep fulfillment for the person who accomplishes the action. Someone, for instance, who forsakes a promising career to devote himself to a humanitarian cause, might be seen as doing a "sacrifice" by friends and relatives who value a high-flung career above everything else. But for the person who is devoting himself to efficiently removing suffering, his

activities are much more meaningful and fulfilling than the career he was promised to. Such activities actually bring about the two-fold accomplishment of others' happiness and one's own happiness. It is a win-win situation. An altruistic act is not less altruistic because it also brought happiness as a "bonus" to the person who performed that deed. As long as the initial motivation and ultimate goal were to benefit others, it can be deemed to be an altruistic action.

Conversely, selfishness cannot be considered to be an efficient way to love oneself since it is one of the main causes of misery. This is a fundamental point according to Buddhist psychology, which is also expressed by psychologist Erich Fromm: "The love of my own self is inseparably connected with the love of any other self. Selfishness and self-love, far from being identical, are actually opposites. The selfish person does not love himself too much but too little; in fact he hates himself." (Fromm 1947)

Generosity, the natural outcome of altruism, has also been found to accomplish the twofold benefit of others and oneself. Social psychologist Elizabeth Dunn of the University of British Columbia (UBC) in Vancouver, Canada, found that people who reported spending money on others were happier that those who spend all their resources on themselves. (Dunn, 2008 and 2011, Aknin, 2009).

The science of altruism and happiness

Many studies have highlighted the link that exists between altruism and well-being (Myers 2000; Diener & Seligman 2002). Research done by Martin Seligman in particular indicates that the joy of undertaking an act of disinterested kindness provides profound satisfaction (Seligman 2002). In this study, some students were given a sum of money and asked to go out and have fun for a few days, while others were told to use this money to help people in need (elderly, sick patients, etc.) All were asked to write a report for the next class. The study has shown that the satisfactions triggered by a pleasant activity, such as going out with friends, seeing a movie, or enjoying a banana split, were largely eclipsed by those derived from performing an act of kindness. When the act was spontaneous and drew on humane qualities, the entire day was improved; the subjects noticed that they were better listeners that day, more friendly, and more appreciated by others.

From a social perspective, altruism is obviously beneficial for others, but there are also benefits for the person expressing them. Several works support the idea that pro-social behavior affects health in a positive way. Various studies (Caprara 2005; Dovidio 2001; Post 2005) have found that generosity toward others is associated with higher levels of well-being. According to McCullough (2002) and Watkins (2003), grateful thinking improves positive affects and well-being. Participating in volunteer activities, membership in non-profit

organizations, and the ability to use one's skills to help others goes hand in hand with a high level of wellbeing.

Psychologist Allen Luks assessed the subjective wellbeing of thousands of Americans who regularly participated in volunteer activities. He found that they were generally in better health than others of the same age, they showed more enthusiasm and energy, and they were less prone to depression than the average population (Luks A. & Payne 1991and Post 2011) Adolescents who spend part of their time to volunteering are less likely to be involved with substance abuse, teenage pregnancy, and school dropout (Johnston Nicholson 2004). People who are going through periods of depression after tragic events such as loss of a spouse recover faster if they spend time helping others (Brown 2008).

Having reviewed six investigations that have taken into account more carefully other factors that could influence the results, Doug Oman concluded that volunteering not only enhances the *quality of life* of older people, but also its *duration* (Oman 2007).

Training altruistic happiness

The collaborative research involving neuroscientists and Buddhist contemplatives began in earnest fifteen years ago. These studies led to numerous publications that have established the credibility of research on meditation and on achieving emotional balance, an area that had not been taken seriously until then. In the words of the American neuroscientist Richard Davidson, "the research on meditation demonstrates that the brain is capable of being trained and physically modified in ways few people can imagine." (Kaufman,2005).

While meditating on loving-kindness and compassion (Lutz 2004), most experienced meditators showed a dramatic increase in the high-frequency brain activity called gamma waves in areas of the brain related with positive emotions and with empathy.

Twenty years ago it was almost universally accepted by neuroscientists that the brain contained all its neurons at birth, and that their number did not change with experience and time. We now know that new neurons are produced up until the moment of death and we speak of *neuroplasticity*, a term which takes into account the fact that the brain changes continuously in relation to our experience. For example, a particular training such as learning a musical instrument or a sport can bring about a profound change. Mindfulness, altruism, compassion, and other basic human qualities that contribute to

happiness can be cultivated through meditation in the same way, and we can acquire the 'know-how' to enable us to do this.

In Buddhism, 'to meditate' means 'to get used to' or 'to cultivate'. Meditation consists of getting used to a new way of being, of perceiving the world and mastering our thoughts. Meditation is a matter not of theory, but of practice. Cultivating loving-kindness and compassion is, according to Buddhism, central to happiness (Ricard 2010).

Barbara Fredrickson tested the effects of learning on self-generated positive emotions through loving kindness meditation. She tested 140 volunteers with no previous experience in meditation and randomly assigned 70 of them to practice loving-kindness meditation 30 minutes a day for seven weeks. She compared the results with the 70 others subjects who did not follow the training. The results were abundantly clear. In her words, "When people, completely new to meditation, learned to quiet their minds and expand their capacity for love and kindness, they transformed themselves from the inside out. They experienced more love, more engagement, more serenity, more joy, more amusement – more of every positive emotion we measured. And though they typically meditated alone, their biggest boosts in positive emotions came when interacting with others. Their lives spiraled upwards. The kindheartedness they learned to stoke during their meditation practice warmed their connections with others." (Fredrickson 2008) Later experiments confirmed that it was these connections that most affected their bodies, making them healthier (Kok 2010).

At Emory University, Atlanta, a team led by Chuck Raison has shown that short-term meditation on loving-kindness reinforces the immune system and diminishes the inflammatory response (Pace 2009).

The contrary forces

Selfishness, excessive self-centeredness, exacerbated individualism, and narcissism are obvious contrary forces to altruism and, consequently, to happiness. Individualism has a constructive aspect that has led to the notion that every person deserves respect and cannot be used as a mere instrument for the interests of other. This concept has led to the recognition of basic human rights and is allowing people to make choices about how they want to spend their lives without being constrained by authoritarian norms imposed upon them.

However, there is another, more harmful aspect of individualism that has increased significantly in the last few generations. It is a form of egocentricity that aims at distancing oneself from any sense of responsibility towards others

and encourages the individual to simply follow his desires and inclinations without much consideration for society. Such individualism has led, particularly in highly developed countries, to negative effects described by psychologist Jean Twenge in *The Narcissism Epidemic* (Twenge 2011). Twenge's research has shown that: "Understanding the narcissism epidemic is important because its long-term consequences are destructive to society." According to the *Diagnostic and Statistical Manual of Mental Disorders* (DSM-IV-TR, 2000) one of the characteristics of narcissism is a lack of empathy.

Individualism and a selfish lack of concern for others and for global issues such as the environment, is a characteristic that American psychologist Tim Kasser found among people who give priority to external values and consumerism. Kasser and his colleague at the University of Rochester discovered through studies spanning two decades and within a representative sample of the population that individuals who focused their lives on wealth, image, social status, and other materialistic values promoted by the consumer society are less satisfied with their lives (Kasser 2003 and 2008).

Consumerist beliefs are not only associated with higher levels of suffering, but also with lower levels of happiness. They report fewer pleasant emotions such as being happy, pleased, joyous, and content. They are more depressed and anxious and prone to headaches and stomach pains. They drink more alcohol and smoke more cigarettes.

They prefer competition to cooperation, contribute less to the public interest as they are primarily focused on themselves, and they give little attention to environmental issues. Their social ties are weakened and they have fewer true friends. They show less empathy and compassion towards those who suffer, are manipulative, and tend to exploit others according to their interests. Even their health is poorer than that of the rest of the population. They are also less interested in solutions that require an overview of problems and a spirit of cooperation.

Similar results have been reported in North America, Europe, and Asia. To summarize, this body of research suggests that a set of beliefs central to consumerism seems to promote, rather than to reduce, personal suffering and works against healthy, compassionate human interactions. For example, the cross-cultural research of Schwartz (1992) reveals that to the extent people value goals such as wealth and status, they tend to care less about values such as 'protecting the environment,' 'attaining unity with nature,' and having 'a world of beauty.'

Conclusion

In this preliminary essay, we have attempted to show that altruism, and its main components, loving-kindness, empathic concern, and compassion, not only promote other's happiness, but also is an important cause for flourishing for those who cultivate these values in their minds and express them in their behavior. Altruism, thus, appears to be the most direct way to accomplish both the happiness of others and one's own. This concept is not only central to Buddhist philosophy and practice, but has been corroborated in recent years by extensive research in psychology and neurosciences. It, therefore, seems that promoting altruism and compassion not only in one's personal life, but also within education and in society at large is a much needed and direct way to address the challenges of the modern world.

References

Aknin, L. B., Norton, M. I. & Dunn, E. W. (2009). From wealth to wellbeing? Money matters, but less than people think. *The Journal of Positive Psychology*, *4*(6), 523–527.

Batson, C.D. (2009) "These Things Called Empathy: Eight Related but Distinct Phenomena." In Decety, J. & Ickes, W. (Eds.) (2009). The social neuroscience of empathy. Cambridge, MA: The MIT Press.

_____. (2011) *Altruism in Humans*, Oxford University Press.

Brown, S. L., Brown, R. M., House, J. S., & Smith, D. M. (2008). Coping with spousal loss: Potential buffering effects of self-reported helping behavior. *Personality and Social Psychology Bulletin*, *34*(6), 849–861.

Caprara, G. V. & Steca, P. (2005). Affective and social self-regulatory efficacy beliefs as determinants of positive thinking and happiness. *European Psychologist, 10,* 275–286.

Dalai Lama, Tenzin Gyatso & Cutler, H. C. (1999). *The Art of Happiness: A Handbook for Living*. Hodder Paperbacks.

Dambrun, M. & Ricard, M. (2011). Self-centeredness and selflessness: A theory of self-based psychological functioning and its consequences for happiness. *Review of General Psychology*, *15*(2), 138.

Danner, D. D., Snowdon, D. A., & Friesen, W. V. (2001). Positive emotions in early life and longevity: Findings from the nun study. *Journal of Personality and Social Psychology, 80,* 804 – 813.

Diener, E. & Seligman, M.E.P., (2002) "Very happy people", *Psychological Science*, 13: 81-84

Dovidio, J. F., & Penner, L. A. (2001). Helping and altruism. In M. Brewer & M. Hewstone (Eds.), *Blackwell international handbook of social psychology: Interpersonal processes* (pp. 162–195). Cambridge, MA: Blackwell.

Dunn, E. W., Aknin, L. B. & Norton, M. I. (2008). Spending money on others promotes happiness. *Science*, *319*(5870), 1687–1688.

Dunn, E. W., Gilbert, D. T., & Wilson, T. D. (2011). If money doesn't make you happy, then you probably aren't spending it right. *Journal of Consumer Psychology*, *21*(2), 115.

Einstein, A. (1950), letter to his friend Robert S. Marcus, a man who was distraught over the death of his young son from polio A facsimile of this often misquoted words of Einstein can be seen. At http://blog.onbeing.org/post/241572419/einstein-sleuthing-by-nancy-rosenbaum-associate producer.

Fredrickson, B. (2013). *Love 2.0: How Our Supreme Emotion Affects Everything We Feel, Think, Do, and Become*. Hudson Street Press.

Fredrickson, B. L., Cohn, M. A., Coffey, K. A., Pek, J., & Finkel, S. M. (2008). Open hearts build lives: positive emotions, induced through loving-kindness meditation, build consequential personal resources. *Journal of personality and social psychology*, *95*(5), 1045.

Fromm, E. (1900-1980). (1947). *Man for Himself : an Inquiry Into the Psychology of Ethics / Erich Fromm* (1st Edition.). New York : Rinehart And Company p. 134-6.

Kasser, T. (2003). *The high price of materialism*. The MIT Press.

_____. (2008). Can Buddhism and consumerism harmonize? A review of the psychological evidence. In *International Conference on Buddhism in the Age of Consumerism, Mahidol University, Bangkok* (pp. 1–3).

Kaufman, M. (2005) interview of Richard Davidson for the *Washington Post.*

Kok, B. E., & Fredrickson, B. L. (2010). Upward spirals of the heart: Autonomic flexibility, as indexed by vagal tone, reciprocally and prospectively predicts positive emotions and social connectedness. *Biological psychology*, *85*(3), 432–436.

Layard, R., (2005). *Happiness, Lessons from a New Science*. Penguin Books.

Luks A., & Payne, P. (1991). *The healing power of doing good: The health and spiritual benefits of helping others.* New York: Ballantine.

Lutz, A., Greischar, L. L., Rawlings, N. B., Ricard, M., & Davidson, R. J. (2004). Long-term meditators self-induce high-amplitude gamma synchrony during mental practice. *Proceedings of the National Academy of Sciences of the United States of America*, *101*(46), 16369.

McCullough, M. E., Emmons, R. A., & Tsang, J-A. (2002). The grateful disposition: A conceptual and empirical topography. *Journal of Personality and Social Psychology, 82,* 112–127.

Monroe, K. R. (1996). *The heart of altruism: Perceptions of a common humanity*. Cambridge University Press.

Myers, D. G. (2000). The American Paradox: Spiritual Hunger in an Age of Plenty. Yale University Press.

Nicholson, H. J., Collins, C., & Holmer, H. (2004). Youth as people: The protective aspects of youth development in after-school settings. *The ANNALS of the American academy of political and social science*, *591*(1), 55–71.

Nowak, M., & Highfield, R. (2011). *SuperCooperators* (Reprint.). Free Press.

Oman, D. (2007). Does volunteering foster physical health and longevity? In S. G. Post (Ed.), *Altruism and health: Perspectives from empirical research* (pp. 15-32). Oxford University Press.

Pace, T. W. W., Negi, L. T., Adame, D. D., Cole, S. P., Sivilli, T. I., Brown, T. D., Issa, M. J., et al. (2009). Effect of compassion meditation on neuroendocrine, innate immune and behavioral responses to psychosocial stress. *Psychoneuroendocrinology*, *34*(1), 87–98.

Philip Hallie, (1978) *Lest Innocent Blood Be Shed: The Story of the Village of Le Chambon and How Goodness Happened There,* New York, Harper & Row.

Post, S. G. (2005). Altruism, happiness, and health: It's good to be good. *International Journal of Behavioral Medicine, 12,* 66 –77.

_____. (2011). *The Hidden Gifts of Helping: How the Power of Giving, Compassion, and Hope Can Get Us Through Hard Times.* John Wiley & Sons.

Ricard, M. (2006). *Happiness: A Guide to Developing Life's Most Important Skill*. Little, Brown and Company.

Rolland, R., (1952), *Jean-Christophe*, Albin Michel, vol. VIII

Schwartz, S. H. (1992). Universals in the content and structure of values: Theory and empirical tests in 20 countries. In M. Zanna (Ed.), *Advances in experimental social psychology*, *(Vol 25)* (pp. 1-65). New York: Academic Press.

Seligman, M. E. P. (2002). *Authentic Happiness: Using the New Positive Psychology to Realize Your Potential for Lasting Fulfillment*. Free Press.

Smith, A. (1759/2002). *The Theory of Moral Sentiments*. Cambridge University Press.

Snower, D. J., (2012), Opening address to the Global Economic Symposium, Rio de Janeiro, 16 Oct. 2012.

Taylor, C. (1989). *Sources of the self: The making of the modern identity*. Harvard University Press

Twenge, Jean M., & Campbell, W. K. (2010). *The Narcissism Epidemic: Living in the Age of Entitlement*. Free Press.

Watkins, P. C., Woodward, K., Stone, T., & Kolts, R. L. (2003). Gratitude and happiness: Development of a measure of gratitude, and relationships with subjective well-being. *Social Behavior and Personality: An Inter-national Journal, 31,* 431– 451.

Chapter 9: Health, Happiness and Wellbeing: Implications for Public Policy

— Julia C Kim

"A wise man should consider that health is the greatest of human blessings"

~ Hippocrates

"The health of the people is really the foundation upon which all their happiness and their powers as a state depend"

~ Benjamin Disraeli (July 24, 1877)

Introduction

Health has long been valued as a good in itself – vital to human well-being and the flourishing of society. Since the mid-20th Century, health has been increasingly framed as a fundamental human right, with every country in the world now party to at least one treaty that addresses health-related rights (WHO, 2012). Similarly, the instrumental value of a healthy population has been historically promoted, whether in relation to a productive workforce, a secure nation-state, or a thriving economy. Reflecting this central importance, most countries now routinely collect national data on health status, and the most widely used global development indicators, such as UNDP's Human Development Index (HDI), the World Bank Development Indicators, and the United Nations Millennium Development Goals (MDGs) all include a health dimension.

Over the past century, our conceptualization of health has evolved considerably, shifting from narrow disease-focused perspectives towards a more holistic understanding, expressed by the World Health Organization in 1948 as "a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity". This conceptualization was groundbreaking at the time because of its breadth and ambition. It recast health in a positive sense, rather than emphasizing disease control; it expanded beyond physical health to include the state of one's mind, or mental well-being, and it challenged us to consider the broader conditions necessary for collectively achieving a 'healthy society'.

In this Report, health encompasses these physical, mental, and social dimensions. Health is one of the nine core domains of Bhutan's index of Gross

National Happiness (GNH), and this chapter will focus upon the importance of health for the achievement of happiness and well-being. It will cover three main areas: 1) Health, happiness and well-being- an overview; 2) Current global health challenges and prevailing approaches to health; 3) Key findings and policy recommendations

Health, happiness and wellbeing - An overview

> All the evidence that we have indicates that it is reasonable to assume in practically every human being, and certainly in almost every newborn baby, that there is an active will toward health, an impulse towards growth, or towards the actualization
>
> ~ Abraham Maslow

From the perspective of GNH, the purpose of development is seen as not merely to further economic growth but rather *to create the conditions for happiness and the well-being of all life*. In this context, human health is seen as one important component within a greater whole. It invites and challenges us to envision our own well-being and survival within a broader landscape that recognizes the interdependence of human life and the wider world that we inhabit. This is a vital and urgent perspective, which aligns with current global efforts to situate health within the emerging Sustainable Development Goals and the post-2015 agenda.

Moreover, this view places health within a development context that goes beyond basic physical survival to encompass the actualization of human potential in its widest sense. At its root, GNH refers to the deep, abiding happiness that comes from living life in full harmony with the natural world, with our communities and fellow beings, and with our culture and spiritual heritage — in short, from feeling totally connected with our world (Thinley, 2012). Given this fundamental interdependence, it is important to consider how health is related to happiness and well-being, and to the other development domains encompassed by GNH.

How is health related to the other GNH domains? The relationship between health and the other GNH domains spans a vast literature. For brevity, key findings of relevance to this report have been summarized here. These relationships are of vital importance in considering some of the persistent health challenges we continue to face in spite of technological advancement and growing investment in the health sector. They are also critical for envisioning what elements and new perspectives might need to be incorporated within a more holistic approach to health and sustainable development.

Psychological wellbeing

In Bhutan's GNH index, the happiness and well-being of the population is measured through a series of questions which include indicators of subjective well-being (SWB). There is a vast literature on this area, which is covered in more detail in Chapter 6 (Psychological Well-being). In relation to health, it is not surprising that across the world, healthier people tend to be happier, as reflected by higher reported levels of subjective well-being (Pinquart and Sörensen, 2000; Kirby, Coleman and Daley, 2004; Steverink et al., 2001). These relationships hold, both for self-reported health as well as for more objective measures of health, including disabilities, doctor visits, or hospitalizations (Layard, Clark and Senik, 2011).

What is perhaps less obvious is that the reverse is also true – happiness and well-being also impact on physical health. Studies that have prospectively followed people over many years have repeatedly shown that those with a more positive outlook and greater life satisfaction have a lower risk of disability and mortality over the course of their lives (George, 2010). Conversely, there is a strong correlation between low subjective well-being and subsequent coronary heart disease, strokes, suicide, and length of life (Layard, Clark and Senik, 2011). There are many potential pathways between SWB and better physical health. Some evidence suggests that people with a negative outlook will tend to engage in riskier health behaviours such as smoking, a sedentary lifestyle, or alcohol use (Steptoe, Dockray and Wardle, 2009). It has also been shown that people with high levels of SWB have greater sources of social support, coping strategies and self-esteem (Pinquart and Sörensen, 2000). Finally, greater SWB has been linked to a number of healthy physiologic effects including lower cortisol levels, improved cardiovascular recovery profiles, lower levels of harmful inflammatory markers, less frequent sleep disturbance, and better immune responsiveness (Pinquart and Sörensen, 2000).

Education

It is well known that higher levels of education are positively associated with a longer life as well as better mental and physical health profiles (Eide and Showalter, 2011; WHO, 2007). Education provides us with stable social networks, increases our sense of agency and improves our access to social, material and health-related resources that are important to health and well-being.

Living standards

Socioeconomic status and living conditions influence health through many direct pathways. Poverty impedes access to basic needs such as food, safe water, transport, medicine and infrastructure. It constrains our opportunities for social participation and our ability to shape and respond to life circumstances

(Marmot, 2002). Poverty also can be a barrier in accessing health services which are too distant or too costly to reach (Yates, 2009). The poor are more likely to be employed under high-risk working conditions, and live in neighborhoods that concentrate poverty amidst a host of other social problems (WHO, 2008). Finally, just as these deprivations have impacts on physical well-being, they have equally negative consequences on mental health (Desjarlais and Kleinman, 1997). Low socio-economic status, poor income, or being unemployed are all associated with higher rates of depression (WHO, 2007).

In relation to GDP, as countries become wealthier, their health prospects (measured by life expectancy) generally improve – but only up to a certain threshold. Once living standards rise and basic needs are met, the relationship between economic growth and life expectancy virtually disappears. Simply stated, for well-off countries, becoming richer doesn't necessarily lead to progressively better health outcomes. Figure 4 demonstrates that after a GDP of approximately $10,000 per person, further gains in wealth do not lead to corresponding longevity gains.

Source: Wilkinson & Pickett, The Spirit Level (2009)   www.equalitytrust.org.uk   The Equality Trust

Figure 4. *Income per head and life-expectancy: rich and poor countries*

Importantly, it is not only absolute poverty, but rather *inequalities* in our living conditions that impact on the health of societies as a whole. (Berkman and Kawachi, 2001b; Kawachi and Kennedy, 1997). Growing evidence points to the association between income inequality and a host of negative health and social

outcomes– including reductions in life expectancy and rising infant mortality rates (Wilkinson, 1996; Davey-Smith, 1996; Waldman, 1992), age-adjusted all-cause mortality (Kennedy, Kawachi and Prothrow-Stith, 1996; Kaplan et al., 1996), rates of mental illness, and behavioral risk factors such as smoking or sedentary behavior (Kaplan et al., 1996), and high levels of accidents, crime and violence (Kennedy, Kawachi and Prothrow-Stith, 1996). Figure 5 profiles the striking linear relationship between income inequality and a composite measure of health and social problems.

Figure 5: *Health and social problems are worse in more unequal countries*

The relationships highlighted above are important for a number of reasons. First, they suggest that a range of critical health and social problems are between three and ten-fold more common in unequal societies (Wilkinson, 2009). Moreover, they reveal that *inequality harms the rich as well as the poor.* The mental and physical stressors associated with inequality lead to higher disease rates across all socio-economic groupings, not just those at the bottom of the economic ladder. Finally, these deprivations have long-term and inter-generational consequences which further entrench the cycle of inequality. At one extreme, stress *in utero* has been linked to patterns of disease in adult life (Barker, 1993). Furthermore, the lived experience of socioeconomic differences has been shown to have negative health consequences throughout one's life, even once the relative difference has abated (Marmot and Shipley, 1996).

Community vitality

The strength of community connections also has a major bearing on health and well-being. The term 'social capital' has been used to reflect the system of networks, norms, and trust relationships that enable communities to address common concerns (Coleman, 1988; Putnam, Leonardi and Nanetti, 1993). Over the past decade, social capital has been widely regarded as a key component of the development equation. Research has demonstrated that countries with higher 'stocks' of social capital experience lower mortality rates (Berkman and Syme, 1979; Kawachi and Kennedy, 1997), better child health outcomes (Drukker et al., 2005), lower rates of mental illness (De Silva et al., 2005), and have higher levels of self-reported health (Miller et al., 2006). Communities with more social capital and community cohesion engage in fewer risky health behaviours such as alcohol abuse (Weitzman and Chen, 2005), crime and violence (Galea, Karpati and Kennedy, 2002), and unprotected sex which can result in sexually-transmitted infections, including HIV (Holtgrave and Crosby, 2003).

Among the major contributors to the decline of social capital has been the advent of television, and more recently the digital age of media (Putnam, 2000). American children between the ages of 8 and 18 spend an astonishing 8 hours and 33 minute per day watching television or using digital media (Henry-J-Kaiser-Family-Foundation, 2007). Television has long been understood to be bad for our health – with excessive watching linked to obesity, tobacco and alcohol use, risky sexual behaviours, and violence (Christakis and Zimmerman, 2006). People and countries that watch more television also have lower levels of social trust (Sachs, 2011).

Cultural diversity and resilience

A loss of cultural resilience and community cohesion can have devastating health and social consequences. For example, among Canada's aboriginal communities, historical policies of assimilation, forced removal of children to reservation schools, and displacement from traditional lands has led to social and cultural dislocation resulting in some of the highest rates of violence and substance abuse in the world (Shkilnyk, 1985). Similarly, in South Africa, the forced displacement of communities from their traditional lands, accompanied by the further erosion of cultural resilience through widespread migrant labor has contributed to unprecedented levels of HIV and tuberculosis (Campbell, 2003). In the face of rapid urbanization and globalization, the rich cultural traditions of many communities are under threat. Yet despite consistently worse indicators of mental and physical health, the well-being of indigenous peoples around the world have been largely excluded from global initiatives such as the MDGs (Heineke and Edwards, 2012).

Ecological diversity and resilience

With improvements in human life expectancy, our world's population has more than tripled in just 60 years – from 2 billion in 1950 to over 7 billion people today. The resulting human pressures on the environment, combined with our focus on maximizing economic growth have contributed to deforestation, global warming and a loss in biodiversity (Wilson, 2002). Our ecological footprint, a measure of human demand on the earth's ecosystems (Rees, 1992), has drifted on an unsustainable course. We are contributing to an ecological overshoot - where it takes 1.5 years for the Earth to fully regenerate the renewable resources that people are using in a single year (World-Wildlife-Foundation, 2012). In this context, a recent scientific review suggests climate change is the biggest global health threat of the 21st century (Costello et al., 2009). Major health consequences result from changing patterns of disease, worsening water and food insecurity, increasingly vulnerable shelters and human settlements, and extreme climactic events (McMichael, 2001; World-Wildlife-Foundation, 2012).

Human migration and the drive towards urban living are related to this population explosion. In 2008, our planet reached a landmark with half the global population living in urban areas. Fifty years ago this figure was 30% and a century before it was 10% (United-Nations, 2008). Echoing historical precedents, such as the emergence of Europe's Black Plague in 1348, and the rise of tuberculosis during England's industrial revolution, this renewed push towards urbanization has carried with it a range of familiar but amplified health hazards. These include substandard housing, overcrowding, air pollution, insufficient or contaminated drinking water, inadequate sanitation and solid waste disposal services, vector-borne diseases, industrial waste, and increased motor vehicle traffic, all alongside the stress associated with rising inequality and unemployment (Moore, Gould and Keary, 2003). In developing regions of the world, 33% of the urban population lives in slums –where such deprivations are especially concentrated. From a global perspective, cross-border migration driven by vast social and economic inequalities and the prospect of a better life, has created conditions of profound vulnerability where human trafficking, exploitation and rampant disease can flourish (UNDP, 2007).

Time use

The balance of how we spend our time, and our freedom to make choices around this, play a critical role in influencing our overall happiness and well-being. Although this is covered more fully in Chapter on Time Use, the nature of work and work-life balance is an area where many important influences on health are played out (World Health Organization, 2008). With the increase in global market integration in the 1970s, there has been an emphasis on productivity and supply of products to global markets. Institutions and employers wishing to compete in this market have argued the need for a flexible and ever-available global workforce. However, this has brought with it a range

of potential negative health effects (Benach and Muntaner, 2007). For example, mortality is higher among temporary workers compared to permanent workers (Kivimäki et al., 2003). Poor mental health outcomes are associated with precarious employment (e.g. non-fixed term temporary contracts, being employed with no contract, and part-time work). Workers who perceive work insecurity experience significant adverse effects on their physical and mental health (Ferrie et al., 2002). Moreover, adverse working conditions can expose individuals to a range of physical health hazards that tend to cluster in lower-status occupations. Stress at work is associated with a 50% excess risk of coronary heart disease (Marmot, 2004; Kivimäki et al., 2006), and there is consistent evidence that high job demand, low control, and effort-reward imbalance are risk factors for mental and physical health problems (Stansfeld & Candy, 2006).

Good governance

Historically, the locus of health governance has rested with national and subnational governments, as individual countries have assumed primary responsibility for the health of their domestic populations. However, in the context of globalization, the capacity to influence health determinants, status and outcomes can no longer be assured through national actions alone, given the intensification of cross-border flows of people, goods and services, and ideas (Dodgson, Lee and Drager, 2002). This is particularly so because so many health determinants are increasingly affected by factors outside of the health sector, as described earlier. Because so many aspects of government and the economy have the potential to affect health and health equity – whether education, finance, housing, employment, or transport - policy coherence is crucial. However, different government departments' policies often contradict one another in relation to their impacts on health. Growth-oriented development is often unhealthy. For example, trade policy that actively encourages the unfettered production, trade, and consumption of foods high in fats and sugars to the detriment of fruit and vegetable production is contradictory to health policy, which recommends relatively little consumption of high-fat, high-sugar foods and increased consumption of fruit and vegetables. Similarly, urban planning, that produces sprawling neighbourhoods with little affordable housing, few local amenities, and irregular public transport does little to promote health for all (World Health Organization, 2008). Finally, health governance is not simply the concern of government institutions. The challenge of involving civil society and the voluntary and private sectors has been raised as a vital and necessary step for strengthening community engagement and social participation in policy processes.

In summary, this section has presented   a brief overview of the complex web of factors shaping human health. While healthier individuals are better able to

participate in and contribute to education, livelihoods, community life, and other domains, it is also apparent that these relationships work in reverse. Moreover, there are qualities of *society as a whole* that fundamentally shape our health prospects – from economic inequality, to community vitality and cultural resilience, to our rural-urban balance and our connection to the natural environment. These are perhaps the most pressing and complex health challenges we will confront in the post-2015 era, and they fundamentally underpin the need for a more holistic health strategy.

Current global health challenges and prevailing approaches to health

The following section lays out a range of global health challenges that have arisen amidst the interdependencies outlined above. It examines how health has been approached within our current development paradigm, and applies a "GNH lens" to highlight successes as well as emerging challenges and opportunities.

Global health challenges: Health in transition

> For 80 per cent of humanity the Middle Ages ended suddenly in the 1950's
>
> ~ Eric Hobsbawm (Age of Extremes, 1994)

The past century has witnessed unparalleled shifts in patterns of health and disease in the wake of profound social change. Globally, average life expectancy has more than doubled – from 31 years in the early 20th century to 67 years by 2010 (Wikipedia, 2012). Due to the related demographic transition, shifting from high to low levels of fertility and mortality, our global population is ageing at an unprecedented rate. By 2050, the number of older persons (60 years or older) in the world will exceed those who are young (under age 15) for the first time in history (United Nations Department of Economic and Social Affairs (UNDESA) Population Division, 2001).

During this period we have seen major reductions in preventable deaths among children (notably from pneumonia, diarrhoea and newborn deaths), and fewer mothers dying in childbirth. These changes have been largely attributable to improvements in living standards, better nutrition, hygiene and sanitation as well as access to more effective healthcare interventions (Link and Phelan, 1995; Schofield, Reher and Bideau, 1991). Yet major health inequalities persist. While impressive health gains have been made in some settings, these have not been shared equally. While life expectancy is 82 years in Japan, it remains only 32 years in Swaziland. A country such as China, with unprecedented development over three decades, faces a 6-fold difference in child mortality rates between rural and urban provinces (World-Bank, 2005). Currently, more than 95% of all

maternal and child deaths occur in 75 countries which include the 49 lowest-income countries in the world (Bhutta et al., 2010).

Given the powerful linkages between health, education, living standards, and the other domains described earlier, it is not surprising that we are witnessing the complex health consequences of profound social change. While deaths from preventable infectious diseases are trending downwards, new epidemics are emerging. Diabetes and cardiovascular disease, already major killers in industrialized countries, now account for up to half the disease burden in many poor countries (WHO, 2012a; Nugent, 2008). Increased consumption of processed foods, high in fat and sugar, accompanied by more sedentary lifestyles has led to skyrocketing levels of obesity (Wilkinson, 2009). The pressures of modern life and economic instability have been linked to growing rates of mental illness and suicide (Fu et al., 2012; Patel, 21 August 2004). Depression now ranks first as the most important contributor to the burden of disease in high and middle-income countries (WHO, 2008a). Nearly one in four adults in the UK and the US were mentally ill in the past year, and one in ten British children suffer from eating disorders, obsessive compulsive tendencies, depression or distress (Wilkinson and Pickett, 2009). In the US, the use of prescription drugs to treat attention deficit hyperactivity disorder in children has increased by 46% in a decade. In the UK, it has quadrupled (Doward, Saturday May 5, 2012).

There can be no doubt that the rapid pace of social, economic and technological transitions over the past century has led to major health breakthroughs. However, these have been accompanied by new and unforeseen challenges that will require creative approaches and fresh perspectives.

Prevailing approaches to health and problems with the current paradigm

Our growing scientific understanding of disease and its distribution has had important bearings on global health priorities. With accelerated technological advances over the past several decades and a detailed understanding of the biological basis for disease, our ability to prevent, diagnose, and treat common illnesses have been greatly enhanced. This has been reflected both in the management of preventable and largely infectious diseases common to poor countries as well as in the chronic and non-communicable conditions increasingly prevalent across all countries.

In poorer countries, our priorities have centered upon preventing avoidable deaths and meeting basic physical health needs. The building blocks of a health system are well-understood (WHO, 2007a) and there is growing experience to suggest that an integrated package of proven low-cost interventions could prevent two-thirds of avoidable child and maternal deaths (Bhutta, Ahmed et

al., 2008; UNICEF, 2008; Bhutta, Ali et al., 2008). A range of rapid diagnostics and standardized protocols have been developed which can greatly assist the management of common conditions (Pai et al., 2012). Global initiatives such as the MDGs have played a crucial role in harnessing momentum and sharpening our focus in addressing major development and health challenges (UN-Millennium-Project, 2005). Finally, there has been a four-fold increase in global support for health to low and middle income countries over the past two decades (Ravishankar et al., 2009). A number of independent funding mechanisms such as the Global Fund for AIDS, tuberculosis and malaria and the Global Alliance for Vaccines and Immunization (GAVI Alliance) have been instrumental in providing predictable year-on-year sources of support.

Our current approaches to health have contributed impressive scientific, technological, and health systems advances. Yet many populations have not benefited equally from this progress, and complex health challenges remain. While firmly grounded in our best biomedical understandings of human health, our current approach has not adequately engaged broader considerations, including the social determinants of health (the economic, political, cultural and environmental factors arising from how we organize our society, which carry profound impacts on health) (World Health Organization, 2008) or the linkages between health and the wider dimensions of happiness and well-being described in this report.

There are also serious concerns regarding the sustainability of current approaches, including our predominant focus on treatment rather than prevention, the disproportionate and unsustainable amount of resources channeled towards end-of-life care, glaring inequalities in health financing, and the diminishing returns between spending and outcomes.

Limited spending on prevention: While poor countries battle to cover the basics, health systems in rich and poor countries alike are increasingly being challenged to meet the long-term care needs of chronic illness among aging populations (Huber et al., 2011). Many chronic diseases are preventable, yet as Figure 6 illustrates, among wealthy countries over 90% of health spending is devoted to curative inpatient and outpatient care, with less than 5% spent on prevention (Conference-Board-of-Canada, May 2011).

Health expenditures per capita, 2008
(US$, PPP)

Source: Conference Board of Canada
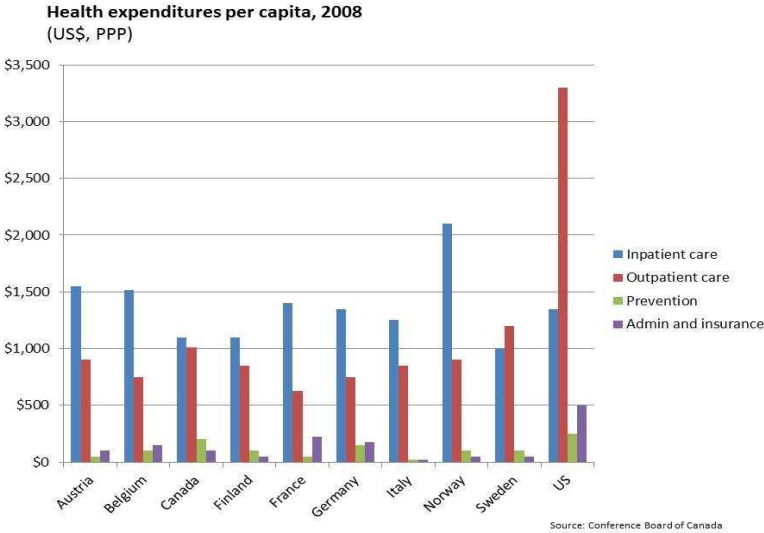
Figure 6: *Health expenditures per capita, 2008*

End-of-life care: As medical science has become better at prolonging life, wealthier countries are orienting a disproportionate amount of health care resources towards end-of-life care. At the start of this century, the world population included approximately 600 million older persons (60 years or older), triple the number recorded fifty years earlier. By mid-century, there will be some 2 billion older persons – once again, a tripling of this age group in a span of 50 years (United Nations Department of Economic and Social Affairs (UNDESA) Population Division, 2001). Such rapid growth will demand far-reaching economic and social adjustments in most countries. In the United States, 30% of Medicare expenditures (a federally funded program for the elderly) are attributable to the 5% of beneficiaries who die each year (Barnato et al., 2004) – with about one third of the expenditures in the last year of life spent during the last month (Emanuel et al., 2002). Most of these costs result from life-sustaining care (e.g. ventilator use and resuscitation), with acute care during the last 30 days of life accounting for 78% of costs incurred during the final year of life (Yu, n.d.). However, recent research on the 'quality of dying' suggests that higher levels of spending are correlated with *worse levels* of physical and psychological distress in the time leading up to death (Figure 7) (Zhang et al., 2009).
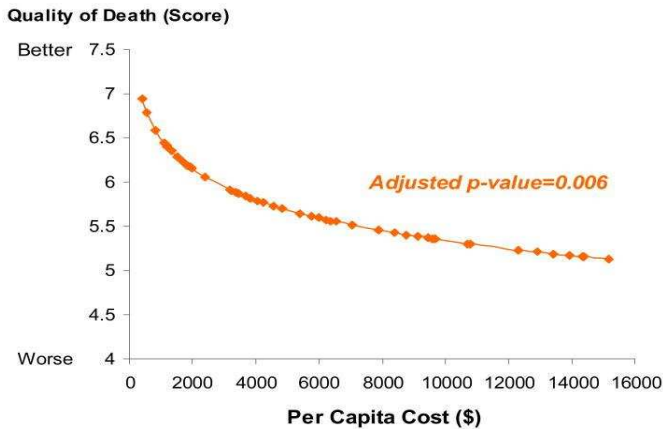
Figure 7: *Association between Cost and Quality of Death in the Final Week of Life*

Health financing and health outcomes: A strong health system depends on adequate resources for health care financing. Global evidence suggests universal coverage can be attained where public financing of health is at least 5% of GDP (World Health Organization, 2008). However, there are currently major inequalities in health financing (OECD, 2012). The health sector is a major contributor to GDP in rich countries – employing healthcare providers and managers, building and equipping facilities, purchasing drugs and laboratory equipment, and financing research. The wealthiest 20% of countries spend more than 16 times the amount spent by countries in the lowest wealth quintile. The top 5% of the countries spend over 4000% more than the lowest quintile (UC-Atlas-of-Global-Inequality, 2012). However, benefits of this additional spending are unclear (The-Economist, 2009; OECD, 2012). For example, the United States, which spends more than any country in the world (17% of GDP and over \$2 trillion, 2010), has the lowest life expectancy among its peer countries, while Japan, with the lowest spending, boasts the highest life expectancy (OECD, 2010). Rather, it seems that the efficiency of spending, the balance between private and public interests, and the capacity of a system to address wider issues of prevention and social determinants that seem to generate better outcomes and value-for-money in the face of limited resources (Balabanova, McKee and Mills, 2011).

In summary, for much of the world, basic health services are still insufficient, with preventable deaths taking place far too often. Increasingly, low and middle income countries face a double-burden of infectious and chronic conditions, placing strains on already fragile health systems. Worsening levels of mental health and the neglect of wider social determinants of health remain persistent challenges.

At the same time, many wealthy countries face diminishing returns on health investments, where further increases in GDP or health-related spending do not seem to be leading to better outcomes. Despite the growing burden of chronic conditions and aging populations, spending on prevention remains far too low and health costs around the time of death remain exorbitant.

As we look towards the future, longstanding priorities to address basic needs are being joined by calls for a broader social movement for health that is holistic, sustainable, and global in scale. Given the scope of these challenges, it is both timely and imperative that a wider vision for a healthy society begins to take shape.

Key findings and policy recommendations

This chapter began by noting that from the perspective of GNH, the higher purpose of development is regarded as not merely serving further economic growth but rather creating the conditions for happiness and the well-being of all life. In this context, regarding health through a "GNH lens" invites us to look for synergies that benefit our own well-being while supporting the sustainability of our planet as a whole. By addressing how health is related to other development domains - through research, measurement, and policy-making (as Bhutan has begun to), we have an opportunity to begin addressing the root causes of ill health through a wider range of policies that include, but go beyond the health sector.

A number of important efforts are currently underway to draw out key lessons from global development initiatives, and to consider how health can and should be addressed in the post-2015 agenda. Common themes are emerging, including the importance of addressing equity and human rights, strengthening health systems, promoting universal healthcare coverage, bringing more attention to non-communicable diseases, mental health, and disabilities, as well as ensuring and that the unfinished agenda of the MDGs is not abandoned. These are important recommendations, and many are also supported by the analysis presented above.

In order to complement and enrich these wider deliberations, this section presents a range of Policy Case Studies that aim to shed light on areas that to date may have not received adequate attention, but which could be instrumental in reframing our approach to health as part of a larger endeavour to promote happiness and well-being. The examples illustrate the interdependence between domains, and how efforts have been made to address this interdependence through policy and action. Some draw from relevant work of the WHO Commission on Social Determinants of Health. Given the diverse contexts in which health problems are situated, the case studies cannot be seen

as universal in their application. Instead they are intended to inspire fresh perspectives on how the principles and approaches of GNH may be adapted and applied in different contexts.

Policy case studies

Good health at low cost

Context: As highlighted above, neither economic growth nor health sector spending *on their own* necessarily translate into better health outcomes. After basic needs are met, additional spending may result in diminishing health returns, as evidenced by many middle income countries which have longer life expectancies and lower mortality rates than much wealthier countries. To better understand this apparent paradox, the Rockefeller Foundation first in 1985 and again 25 years later drew together lessons from countries that were able to achieve "good health at a low cost."

Case Study 1: Good health at a low cost

Overview: In 1985, the Rockefeller Foundation commissioned a series of papers that explored the question of why some poor countries were able to achieve better health outcomes that others at similar (or greater) levels of income. The original report, entitled *Good health at a low cost* (GHLC) identified Costa Rica, China, Sri Lanka and Kerala State in India as areas of the world where dramatic reductions in infectious disease, infant mortality rate, and improvements in life expectancy were experienced in the absence of a parallel rise in their economic output (Halstead, Walsh and Warren, 1985).

This report was followed-up 25 years later by a similar assessment of a new group of GHLC countries. Bangladesh, Ethiopia, Kyrgyzstan, the Indian state of Tamil Nadu and Thailand had more recently been achieving major health gains well in excess of what one would expect based on their incomes (Balabanova, McKee and Mills, 2011). For example:

- Thailand witnessed steep reductions in maternal mortality between 1960-1990
- In Tamil Nadu, maternal mortality rates were less than half the Indian national average.
- Ethiopia had gone from being one of the worst performers in under-5 mortality to outperforming neighbouring Tanzania and Uganda.
- Bangladesh and Tamil Nadu had among the longest life expectancies for men and women in their regions.
- Thailand, a country that had achieved all the health MDGs, now adopted MDG+, a set of targets which go well beyond the internationally agreed goals.

- Thailand and Kyrgyzstan achieved universal health care coverage through expansion of health insurance schemes, unique among countries at their income level.

Benefits and impacts: What were these countries doing differently that resulted in such major gains health outcomes relative to their per capita income? A number of common elements were observed across countries assessed in both time periods, with striking similarity in the lessons learned. For GHLC countries, a number of crucial perspectives emerged to explain their progress:

- Health was conceived as a social good, and not just the end-product of health sector spending.
- Solid policies and programs were put into place to address the social determinants of health – including education (particularly for women), nutrition, land reform, basic infrastructure and livelihood security.
- There was a commitment to social equity with a special emphasis on reaching out to the most vulnerable groups. This included deploying 'ancillary nurse midwives' to rural areas in Kerala, India and 'barefoot doctors' in rural China.
- Investments focused on primary health care with a strong emphasis on prevention. This was particularly true in the follow-up report, where strong health systems have become an even more important driver of health improvements than ever before.
- There was a commitment to high-levels of community involvement in health care

Potential critiques and Potential Policy Recommendations: The GHLC work and the Alma-Ata Charter upon which it was based are not without their critics. The WHO definition itself, conceiving health as "physical, mental and social well-being," while aspirational, was not felt to be a measurable objective. Growth-oriented economic policies resulted in cuts in public funding for health in many poor countries, with privatization of health care, and the implementation of user-fees as a mechanism to recover costs (Lawn et al., 2008). A comprehensive primary health care system was simply out of reach and unaffordable. Many countries still opt for a 'selective' approach, where a few services and commodities are prioritized and administered vertically (Cueto, 2004).

Despite these reservations, the GHLC experience continues to resonate and a range of policy recommendations have emerged. First, access to an integrated package of basic health services is a fundamental right. Every effort should be made to develop an appropriately staffed and well-equipped health system, and to ensure universal coverage for all citizens, irrespective of income, social status

or residency. Second, a comprehensive package of PHC services with a strong emphasis on prevention can be implemented at a relatively low cost. Third, addressing health inequalities is possible – with GHLC countries making major inroads to addressing the needs of remote and vulnerable populations Fourth, global partnerships are essential. The four-fold increase in development assistance for health over the past two decade and the emergence of predictable and stable global financing mechanisms such as the Global Fund has created new opportunities for countries to ensure basic needs are met. Fifth, for rich and poor countries alike is the imperative of community involvement in health care policies and programs. Finally is the crucial importance of efforts to work across sectors to address the social determinants of health.

Improving end of life care

Context: As we enter a period of unprecedented population growth and aging, it is imperative that we begin to pay more attention to the quality and the costs of end of life care. The Institute of Medicine has defined "quality of death" as a death that is free from avoidable distress and suffering for patients and their families, in accord with the patients' and families' wishes, and reasonably consistent with clinical, cultural, and ethical standards (Field and Cassel, 1997). Studies suggest that doctors and patients are ambivalent about talking about death, and often avoid end-of-life (EOL) conversations. They worry that such conversations raise the limitations of medical treatment and the reality that life is finite - both of which may cause psychological distress. However, studies show that EOL discussions may have cascading benefits for patients and their caregivers, including less aggressive medical care near death, earlier hospice referrals, and better quality of death. Conversely an absence of EOL conversations has been associated with more aggressive medical care in the final week of life, worse quality of death, and worse bereavement adjustment for caregivers (Wright et al., 2008). Advanced cancer patients who reported EOL conversations with physicians had 35.7% lower health care costs in their final week of life, largely due to more limited use of intensive life-sustaining interventions. Conversely, higher health care costs were not associated with better outcomes at the EOL: there was no survival difference associated with health care expenditures, and patients who spent more on health care actually had worse quality of life in their final week of life (Zhang et al., 2009).

From a more holistic perspective, patients and loved ones undergo tremendous stress and suffering in facing critical illness. Professional caregivers may also face similar stress and sadness. There is growing recognition that in caring for critically ill patients, health care professionals need to recognize the potential importance of spirituality in the lives of patients, families, and loved ones and in their own lives (Puchalski, 2004). Recent research shows that across many cultures, spiritual care can play an important role in coming to terms with

suffering and illness, coping with disease-related symptoms, improving quality of life, and shaping medical decision-making near death (El Nawawi, Balboni and Balboni, 2012). Yet despite such empirical evidence, spiritual care remains insufficiently addressed by the current medical system. The following case study illustrates a national level effort in the United States to improve the quality of end of life care across a diverse range of patient populations and settings. Advancing innovative and effective policies in this area could potentially address important issues across a range of domains beyond health, such as the well-being of patients and those who care for them, healthcare expenditures, and the spiritual needs and cultural traditions that surround death and dying (*psychological well-being*, *living* standards, *cultural resilience*).

Case Study 2: Improving the quality of end of life care

Overview: From 1998-2004, the Promoting Excellence in End-of Life Care, a national program of The Robert Wood Johnson Foundation, provided funding ($9.2 million) and technical assistance to 22 demonstration projects representing a wide range of health care settings and patient populations to develop innovative models for delivering palliative care that addressed documented deficiencies in the care of patients and families facing the final stage of life. The programs were implemented across a range of urban and rural health care settings (e.g. in integrated health systems, hospitals, outpatient clinics, cancer centers, nursing homes, renal dialysis clinics, inner city public health and safety net systems and prisons). Populations served included prison inmates, military veterans, renal dialysis patients, Native Americans, Native Alaskans, and African American patients, inner-city medically underserved patients, pediatric patients, and persons with serious mental illness. Projects were selected which had potential national implications (e.g. one project included eight dialysis centers in Western Massachusetts; another included 32 Alaskan Native villages) for improving the quality of end-of-life care by expanding availability of and access to palliative care for people with progressive, life-threatening conditions.

Benefits and impact: Project sites developed and utilized new palliative care services and addressed quality through implementation of new standards and clinical protocols, which included advance care planning and spiritual palliative care tools. Each project conducted its own evaluation using different measures and the specific methods and depth of evaluation varied widely. The projects demonstrated that by individualizing patient and family assessment, effectively employing existing resources and aligning services with specific patient and family needs, it is possible to expand access to palliative services and improve quality of care in ways that are financially feasible and acceptable to patients, families, clinicians, administrators, and payers. Costs of care, where they could be assessed, were unaffected or decreased for project patients versus historical

---

or concurrent control. Hosting or adopting institutions sustained or expanded twenty of the 22 models, and feedback from stakeholders was positive (Byock et al., 2006).

Potential Critiques and Policy Implications:

Potential critiques*:* Despite the extensive literature on the cost-effectiveness of hospice care and palliative care relative to curative-oriented conventional care, a clear consensus on findings has been difficult due to lack of consistency in methodological approaches (Robinson & Pham, 1996). However, the most definitive review of various studies assessing the cost-effectiveness of hospice care relative to conventional care that occurred after the U.S. Medicare hospice benefit had become widely utilized concluded that the cost-savings attributable to the benefit was 25-40% during the last month of life, but only 10-17% during the last 6 months of life (Emanuel, 1996). The most current comprehensive study found that hospice use reduced Medicare program expenditures over the last year of life by an average of $2309 per hospice care recipient (Taylor, Ostermanna, Van, Tulskyc, & Steinhauserc, 2007). Significant also, from a policy standpoint, is this study's findings that in 70% of cases, earlier introduction of hospice care would have resulted in increased saving (Almgren, n.d.).

Potential Policy Recommendation: Large-scale regional projects that track resource utilization, quality of care and satisfaction should further test the findings from Promoting Excellence projects on a population basis and investigate the potential value of these approaches to national health care systems.

It is worth noting that the challenge of providing palliative care will become increasingly relevant to developing countries, where the pace of population ageing is much faster, and is taking place at much lower levels of socio-economic development (United Nations Department of Economic and Social Affairs (UNDESA) Population Division, 2001). Already, given the high burden of life-threatening illnesses, including HIV/AIDS and cancer and, there is a need for palliative care in developing countries. Current provision is at best limited, and at worst non-existent. Access to essential medicines for control of pain is extremely limited and far below the global mean. There is a general lack of government policies that recognize palliative care as an essential component of health care and there is inadequate training for both health care professionals and the general public about palliative care. Appropriate models for translating knowledge and skills into evidence-based, cost-effective interventions in developing countries is needed (Ddungu, 2011).

Conducting health impact assessments (HIA)

Context: As noted earlier, diverse sectors such as transport, agriculture and housing have profound impacts on health. For example, transport is a major factor in traffic injuries, air pollution and noise – and "healthy transport policies" can help reduce these risks, as well as promoting walking and cycling. In agriculture, fertilizers and pesticides may boost crop yields. But wise use is important to protect farm workers and consumers from excessive chemical exposure. WHO estimates that healthier environments in homes and workplaces, in rural settings and cities, including access to healthy foods, water, energy and transport, could prevent up to one quarter of deaths annually worldwide (http://www.who.int/hia/en/). In this context, Health Impact Assessment (HIA) have received increasing attention as a potential means of addressing social determinants of health through public policy. It is a structured process that uses scientific data, professional expertise, and stakeholder input to identify and evaluate the public-health consequences of proposals and suggests actions that could be taken to minimize adverse health effects and optimize beneficial ones.

Case Study 3: Health Impact Assessments

Overview: HIA's are being undertaken in a wide range of countries across the development spectrum. As an example, research on HIA in Thailand began in 2000 and a HIA Commission was appointed by the National Health Commission in 2007. In 2009 the commission proposed a paper to the ASEAN secretariat to promote HIA in ASEAN to member states. There are currently more than 20 ongoing cases of community based HIA in Thailand, examining projects such as biogas and mining concessions. The HIA Commission, in cooperation with the Ministry of Commerce and Ministry of Foreign Affairs, have conducted a study on how to integrate HIA into the Free Trade Agreement (FTA) negotiation process. This study was conducted in accordance with Thailand's National Health Assembly resolution on ensuring participation in the Free Trade Agreement negotiation process.(Thailand National Health).

Benefits and impact: Thailand has been successful at explicitly introducing HIA as part of its recent health sector reforms. HIA is now required as part of the new National Health Act 2002. National and regional HIAs have been focused on infrastructure or development projects, seeking to balance the health of local communities with other policy pressures. For example, the HIA of Pak Mon Hydro Power Dam showed that the local villages had suffered due to a reduction in fishery resources, which had a negative impact on local income and socioeconomic status. The HIA has led to the needs of the local villages being taken into account and mitigation measures initiated to improve rural livelihoods by changing the dam opening frequency to aid a return of the

---

fishing industry. Thailand has also developed HIA at a national policy level, for example, looking at the health and economic effects of sustainable agriculture.

Potential Critiques and Policy Implications:
Potential critiques: Few evaluations of HIA practice have been conducted. The quality of HIA could be substantially improved with better evidence on the relationship of "distal" factors to health outcomes. Nevertheless, despite acknowledging the need for scholarship in health impact assessment, the Committee on HIA (National Academy of Sciences, USA) and WHO conclude that HIA is valuable even with a lack of perfect forecasting data and tools because it is better to consider potential health risk and benefits than to ignore them routinely.

Potential Policy Recommendation: The further development and evaluation of HIA should be encouraged, at both a practitioner and research level, to advance the evidence base for HIA.

The Thai example shows that it is possible in a short timescale to implement a strong and effective system of HIA of policy if there is government commitment, the presence of a policy framework, and sufficient resources (World Health Organization, 2008). Similar to Bhutan's approach to GNH, HIA's locate health within a range of interdependent domains which collectively impact on overall happiness and well-being. By using data to examine these relationships and to screen potential projects and policies, they are a promising application of GNH principles and practice.

The link between mindfulness and health – implications for public policy

Altruistic (other-regarding) emotions and behaviours are associated with greater well-being, health, and longevity. With some caveats, a strong correlation exists between the well-being, happiness, health, and longevity of people who are emotionally and behaviourally compassionate, so long as they are not overwhelmed by helping tasks. Increasing research data on altruism and its relation to mental and physical health suggests several complimentary interpretive frameworks, including evolutionary biology, physiological models, and positive psychology. Potential public health implications of this research need to be expanded, as well as directions for future studies, and this is an area of growing interest.

Case Study 4: Mindfulness and stress reduction education
Overview: ERASE-SPS (Enhancing Resiliency among Students Experiencing Stress and Promoting Pro-social orientation) is a skill-oriented, school-based and teacher mediated program that utilizes cognitive-behavioural, narrative and somatic interventions in combination with a mindfulness approach. The

premise of the program is that in order to help pupils develop empathy, compassion and pro-social orientation, one needs to simultaneously strengthen natural coping skills and acquire resiliency strategies as well as impart values of shared/common humanity and promote tolerance toward the other. Thus, the goals of the program are:

- To provide pupils with a rational framework with which they can understand and normalize their   stress-related reactions
- To help pupils identify and strengthen their natural coping resources
- To equip pupils with resiliency strategies
- To develop pupils' empathy toward self and other
- To promote pupils' tolerance toward the other (shared humanity)
- To strengthen teachers coping skills and enhance their resiliency
- To develop teachers' empathy and compassion toward their pupils

The program is a 16-weekly hour and a half sessions delivered by homeroom teachers within the on-going school curriculum during the school year. It has been designed for elementary-school pupils, secondary-school pupils and high-school pupils. The program has been implemented by the Center for Compassion and Altruism Research and Education (CCARE), Stanford University School of Medicine (USA), PREPARED Center for Emergency Response, Ben Gurion University, (Israel), and Brit Olam International Volunteering & Development, Disaster Relief and Rehabilitation Unit, Bnie Brak, (Israel).

Benefits and impact: Thus far, the program has reached approximately 60,000 children worldwide have been adapted and implemented in more than 14 different cultures (e.g. Israel, Palestine, Turkey, China, India, Sri Lanka, Thailand, Samoa, Haiti, Indonesia, USA, New Zealand Tanzania and Congo), The program uses the train the trainers cascade method, and has proven to be highly scalable and effective. For instance, in the aftermath of the Tsunami, 40 mental health professionals were trained to deliver the program, who then trained over 300 hundreds teachers who delivered the program to approximately 20,000 pupils at a cost of less $2.00 per pupil. There have been several randomized control trials empirically demonstrating the efficacy of Erase-Stress in reducing stress-related symptoms, in enhancing children and adolescents' resiliency and in improving school atmosphere (Berger et al., 2007; Berger and Gelkopf, 2009; Berger et al., 2011). Data suggested that the program is feasible and affordable.(Gelkopf et al., 2008) Application of ERASE-SPS among Jewish and Arab elementary school children has demonstrated that it is possible to reduce stress, depression and anxiety, as well as teach children the values of shared/common humanity and promote tolerance toward the other

(Gelkopf and Berger, 2009).

Potential critiques and policy implications: Potential challenges in implementing the program include:

- The school administration needs to be committed to the program as it requires freeing the time within the regular curriculum to implement the 16 sessions of the program.
- The homeroom teachers also need to be committed to the program as the require to free 24 hours for training and 8 hours for supervision
- If implemented through a cascade model, the educational or mental health professional need to have the skills and the availability to train the homeroom teachers.
- The parents need to be involved in the program
- Though overall the program is not financially prohibitive, it does require funds for the training and for the teachers' manuals and workbook of the pupils.

Potential Policy Recommendation: Mindfulness and compassion training programs such as ERASE-SPS should be integrated within the regular education curricula (e.g. as part of social studies or life skills).

Other Case Studies (drawn from the WHO Commission on Social Determinants of Health) (World Health Organization, 2008)

Designing urban environments to be safe, accessible, attractive, and to encourage physical activity

Overview: The Heart Foundation in Victoria, Australia, developed Healthy by Design to assist local government and associated planners in the implementation of a broader set of Supportive Environments for Physical Activity guidelines. Healthy by Design presents design considerations that facilitate 'healthy planning', resulting in healthy places for people to live, work, and visit. Healthy by Design provides planners with supporting research, a range of design considerations to promote walking, cycling, and public transport use, a practical design tool, and case studies. The 'Design Considerations' demonstrate ways planners can improve the health of communities through their planning and design. This is encouraged by providing: well-planned networks of walking and cycling routes; streets with direct, safe, and convenient access; local destinations within walking distance of homes; accessible open spaces for recreation and leisure; conveniently located public transport stops; local neighbourhoods fostering community spirit. Traditionally, planners consider a range of guidelines that have an impact on health, safety, and access, often in isolation from each other. The Healthy by Design matrix has been developed as a practical tool that demonstrates the

synergies between the different guidelines that influence built environment design, all of which contribute to positive health outcomes.

Working across sectors to tackle obesity

Overview: Obesity is becoming a real public health challenge in transitioning countries, as it already is in high income nations. Obesity prevention and amelioration of existing levels require approaches that ensure an ecologically sustainable, adequate, and nutritious food supply; material security; a built habitat that lends itself to easy uptake of healthier food options and participation in both organized and unorganized physical activity; and a family, educational, and work environment that positively reinforces healthy living and empowers all individuals to make healthy choices. Very little of this action sits within the capabilities or responsibilities of the health sector. Positive advances have been made between health and non-health sectors – for example, healthy urban living designed by urban planners and health professionals working together, and bans on advertisements for foods high in fats, sugars, and salt during television programmes aimed at children. However, a significant challenge remains: to engage with the multiple sectors outside health in areas such as trade, agriculture, employment, and education, areas in which action must take place if we are to redress the global obesity epidemic. (Can sharpen focus to describe policies on advertising)

National level action to tackle work place stress

Overview: The Health and Safety Commission identified work stress as one of its main priorities under the Occupational Health Strategy for Britain 2000: Revitalising Health and Safety, which set out to achieve, by 2010, a 30% reduction in the incidence of working days lost through work-related illness and injury; a 20% reduction in the incidence of people suffering from work-related ill-health; and a 10% reduction in the rate of work-related fatal and major injuries. Moreover, excessive working hours and night work have also been shown to contribute to health problems; for example, various studies have shown that people who do not regularly take vacations are at greater risk for heart disease, and women who do not take vacations are at greater risk for depression.

In 2004, the United Kingdom Health and Safety Executive (HSE) introduced management standards for work-related stress. These standards cover six work stressors: demands, control, support, relationships, role, and change. A risk assessment tool was released at the same time as the management standards; this consists of 35 items on working conditions covering the six work stressors. The HSE management standards adopted a population-based approach to tackling workplace stress aimed at moving organizational stressors to more desirable levels rather than identifying individual employees with high levels of

stress. Instead of setting reference values for acceptable levels of psychosocial working conditions that all employers should meet, the standards set aspirational targets that organizations can work towards. The management standards are not in themselves a new law but can help employers meet their legal duty under the Management of Health and Safety at Work Regulations 1999 to assess the risk of stress-related ill-health activities arising from work.

As part of a 3-year implementation programme, in 2006/07 the HSE actively rolled out management standards to 1000 workplaces by providing support for both conducting risk assessments and making changes based on results of risk assessments. So far, evaluations in workplaces adopting the management standards approach have mostly been qualitative and good practice case studies are being made available on the HSE website (www.hse.gov.uk/stress). A national monitoring survey was conducted in 2004 before the introduction of the management standards, to provide a baseline for future monitoring of trends in psychosocial working conditions.

Public policy to reduce reliance on cars and encourage public transport and physical exercise

Overview: The primary objective of the London Congestion Charge (LCC) scheme was to address the ever-increasing congestion problem that was hampering business and damaging London's status as a world city. A major strength of the LCC is its long-term incremental nature. The LCC area was widened and the cost level raised 2.5 years after its implementation. This is fundamental to a behaviour change programme, as it means that the public can take decisions about their future behaviour based on a firm expectation that the balance of financial advantage will continue to move away from the car. Key outcomes were:

- Between 35000 and 40000 car trips/day switched to public transport, creating an average 6 minutes' additional physical activity per trip compared with private motor transport.
- Between 5000 and 10000 car trips switched to walking, cycling, motorcycle, taxi, or car share.
- Cycling mileage within the zone rose by 28% in 2003 and by a further 4% in 2004.
- Survey respondents reported improvement in comfort and overall quality of walking and public transport systems.
- A large portion of the scheme revenues were reinvested in improvements in public transport, walking, cycling, and safe routes to schools.

Conclusion

Health and happiness are unquestionably connected. Most current global health initiatives continue to focus on provision of healthcare (or rather, the treatment of illness). Effective future interventions should focus on the broader dimensions of health as defined by the World Health Organization – including physical, mental and social well-being, and their contribution to the flourishing of human potential. It might be useful to understand health through the metaphor of a HOUSE in which the healthcare system is merely the roof, the last protection against disease. But healthy societies should pay attention to the FOUNDATION (socioeconomic conditions, care for children, both pre-natal and in their early years) and the WALLS, including lifestyle, social connection and environmental and workplace conditions. An expensive roof (as in the United States) on a house with a weak foundation and walls will likely provide little advantage in terms of health outcomes, and may well come crashing down. A simpler, less-costly roof may be enough where the foundation and walls are strong, and attention is paid to preventive health measures and social determinants of health. Viewing health through a "GNH lens" invites us to look for approaches and policies that address the root causes of ill health and to build a strong house that is in harmony with a sustainable planet.

References

Almgren, G. R., n.d. Policy issues related to aging and palliative care. In: Council on Social Work Education, ed. *Palliative Care with older adults*.

Balabanova, D., McKee, M. and Mills, A., 2011. *Good health and a low cost 25 years on: what makes a successful health system?* London: London School of Hygiene and Tropical Medicine.

Barker, D. J. P. 1993. *Fetal and infant origins of adult disease,* London: BMJ Publishing.

Barnato, A. E., Mcclellan, M. B., Kagay, C. R. and Garber, A. M., 2004. Trends in inpatient treatment intensity among Medicare beneficiaries at the end of life. *Health services research*, 39(2), 363-376.

Benach J, Muntaner C, Santana V, chairs, 2007. Employment conditions and health inequalities. Final Report to the WHO Comission on Social Determinants of Health (CSDH).

Berger, R. and Gelkopf, M., 2009. School-based intervention for the treatment of tsunami-related distress in children: A quasi-randomized controlled trial. *Psychotherapy & Psychosomatics,* 78, 364-371.

Berger, R., Gelkopf, M. and Heineberg, Y., 2011. A school-based intervention for reducing traumatic stress related symptomatology in students exposed to on-going and intense war-related stress: a quasi-randomized controlled study. *Adolescent Health,* 51 453-461.

Berger, R., Pat-Horencyk, R. and Gelkopf, M., 2007. School-based intervention for prevention and treatment of elementary pupil's terror-related distress in Israel: a quasi-randomized controlled trial. *Journal of Traumatic Stress,* 20, 541-55.

Berkman, L. and Syme, S. L., 1979. Social networks, host resistance, and mortality: a 9-yr follow-up study of Alameda County residents. *American Journal of Epidemiology,* 109, 186-204.

Berkman, L. F. and Kawachi, I., 2001b. *Social Epidemiology.* Oxford: Oxford University Press.

Bhutta, Z. A., Ahmed, T., Black, R. E., Cousens, S., Dewey, K., Giugliani, E., and Shekar, M., 2008. What works? Interventions for maternal and child undernutrition and survival. *The Lancet,* 371,417-440.

Bhutta, Z. A., Ali, S., Cousens, S., Ali, T. M., Haider, B. A., Rizvi, A. and Black, R. E., 2008. Interventions to address maternal, newborn, and child survival: what difference can integrated primary health care strategies make? *The Lancet*, 372(9642), 972-989.

Bhutta, Z. A., Chopra, M., Axelson, H., Berman, P., Boerma, T., Bryce, J. and Wardlaw, T., 2010). Countdown to 2015 decade report (2000–10): taking stock of maternal, newborn, and child survival. *Lancet (London, England)*, 375 (9730), 2032.

Byock, I., Twohig, J. S., Merriman, M., and Collins, K., 2006. Promoting excellence in end-of-life care: a report on innovative models of palliative care. *Journal of palliative medicine*, 9(1), 137-151.

Campbell, C., 2003. *Letting them die: How HIV/AIDS prevention programmes often fail.* Bloomington: Indiana University Press.

Christakis, D. A. and Zimmerman, F. J., 2006. Media as a public health issue. *Archives of Pediatric and Adolescent Medicine,* 160(4), 445-446.

Coleman, J., 1988. Social capital in the creation of human capital. *American Journal of Sociology,* 94 Suppl, s95-120.

Conference-Board-of-Canada, May 2011. Health spending: Do countries get what they pay for when it comes to health care? *Conference Board of Canada* http://www.conferenceboard.ca/hcp/hot-topics/healthspending.aspx.

Costello, A., Abbas, M., Allen, A., Ball, S., Bell, S., Bellamy, R. & Patterson, C., 2009. Managing the health effects of climate change. *The Lancet (London, England)*, 373(9676), 1693-1733.

Cueto, M., 2004. The origins of primary health care and selective primary health care. *American Journal of Public Health,* 94,1864-1874.

Davey-Smith, G., 1996. Editorial: Income inequality and mortality: why are they related? *British Medical Journal,* 312.

Ddungu, H., 2011. Palliative care: what approaches are suitable in developing countries? *British journal of haematology,* Jun 28. doi: 10.1111/j.1365-2141.2011.08764.x. [Epub ahead of print].

De Silva, M. J., McKenzie, K., Harpham, T. and Huttly, S. R., 2005. Social capital and mental illness: a systematic review. *Journal of Epidemiology and Community Health*, 59(8), 619-627.

Desjarlais, R. and A. Kleinman, 1997. Violence and well-being. *Social Science and Medicine*, 45(8), 1143-1145.

Dodgson, R., Lee. K. and Drager, N., 2002. *Global Health Governance: A conceptual review.* London/Geneva: Centre on Global Change & Health Dept of Health & Development, London School of Hygiene & Tropical Medicine, and World Health Organization.

Doward, J., 2012. Ritalin use soars fourfold in U.K. as psychologists warn of untested drug cocktails. In: *The Guardian*. Saturday May 5, 2012: London.

Drukker, M., Buka, S. L., Kaplan, C., McKenzie, K. and Van Os, J., 2005. Social capital and young adolescents' perceived health in different sociocultural settings. *Social science & medicine*, 61(1), 185-198.

Eide, E. R. and Showalter, M. H., 2011. Estimating the relation between health and education: what do we know and what do we need to know? *Economics of Education Review*, 30(5), 778-791.

El Nawawi, N. M., Balboni, M. J. and Balboni, T. A., 2012. Palliative care and spiritual care: the crucial role of spiritual care in the care of patients with advanced illness. *Current Opinion in Supportive and Palliative Care,* 6(2), 269-74.

Emanuel, E. J., 1996. Cost savings at the end of life: what do the data show? *JAMA 275,* 1907-14

Emanuel, E. J., Ash, A., Yu, W., Gazelle, G., Levinsky, N. G., Saynina, O., … and Moskowitz, M., 2002. Managed care, hospice use, site of death, and medical expenditures in the last year of life. *Archives of Internal Medicine,* 26, 162.

Ferrie J.E., Shipley M.J., Stansfeld S.A., Marmot M.G., 2002. Effects of chronic job insecurity and change in job security on self reported health, minor psychiatric morbidity, physiological measures, and health related behaviours in British civil servants: the Whitehall II study. *Journal of Epidemiology and Community*, 56, 450–454

Field, M. J. and Cassel, C. K., 1997. Approaching death: improving care at the end of life. Institute of Medicine Report. Washington, DC: Institute of Medicine.

Fu, T. S. T., Lee, C. S., Gunnell, D., Lee, W. C. and Cheng, A. T. A., 2012. Changing trends in the prevalence of common mental disorders in Taiwan: a 20-year repeated cross-sectional survey. *The Lancet*, doi: 10.1016/S0140-6736(12)61264-1.

Galea, S., Karpati, A. and Kennedy, B., 2002. Social capital and violence in the United States, 1974–1993. *Social science & medicine*, 55(8), 1373-1383.

Gelkopf, M. and Berger, R., 2009. A school-based, teacher-mediated prevention program (ERASE-Stress) for reducing terror-related traumatic reactions in Israeli youth: a quasi-randomized controlled trial. *The Journal of Child Psychology and Psychiatry,* 50, 962-971.

Gelkopf, M., Ryan, P., Cotton, S. and Berger, R., 2008. The impact of a "training of the trainers" course for helping Tsunami-Survivor children on Sri Lankan disaster volunteer workers. *International Journal of Stress management,* 15, 117-135. HTTP://WWW.WHO.INT/HIA/EN/.

George, L. K., 2010. Still happy after all these years: research frontiers on subjective well-being in later life. *The Journals of Gerontology Series B: Psychological Sciences and Social Sciences*, 65(3), 331-339.

Halstead, S. B., Walsh, J. A. and Warren, K. S., 1985. *Good health at a low cost.* New York: Rockefeller Foundation.

Heineke, C. and Edwards, S. 2012. *Health inequities of indigenous peoples and ethnic and cultural minorities – Turning the tide through the post-2015 development framework*. 2012, Health Poverty Action.

Henry-J-Kaiser-Family-Foundation, 2007. *Food for thought: televisoin food advertising to children in the United States*. Washington, DC: The Henry J Kaiser Family Foundation.

Holtgrave, D. R. and Crosby, R. A., 2003. Social capital, poverty, and income inequality as predictors of gonorrhoea, syphilis, chlamydia and AIDS case rates in the United States. *Sexually Transmitted Infections*, 79(1), 62-64.

Huber, M., Knottnerus, J. A., Green, L., Horst, H. V. D., Jadad, A. R., Kromhout, D. and Smid, H., 2011. How should we define health? *British Medical Journal,* 342. http://dx.doi.org/10.1136/bmj.d4163.

Kaplan, G. A., Pamuk, E. R., Lynch, J. W., Cohen, R. D. and Balfour, J. L., 1996. Inequality in income and mortality in the United States: analysis of mortality and potential pathways. *British Medical Journal,* 312, 999-1003.

Kawachi, I. and Kennedy, B., 1997. Health and social cohesion: why care about income inequality? *British Medical Journal,* 314, 1037-1040.

Kennedy, B. P., Kawachi, I. and Prothrow-Stith, D. I., 1996. Income distribution and mortality: cross-sectional ecological study of the Robin-Hood index in the United States. *British Medical Journal,* 312, 1004-1007.

Kirby, S.E., Coleman, P.G., Daley, D., 2004. Spirituality and well-being in frail and nonfrail older adults. *Journals of Gerontology: Series B: Psychological Sciences and Social Sciences* 59B, P123–P129.

Kivimäki, M., Head, J., Ferrie, J. E., Shipley, M. J., Vahtera, J. & Marmot, M. G., 2003. Sickness absence as global measure of health: evidence from mortality

in the Whitehall II prospective cohort study. *British Medical Journal*, 327, 364-370.

_____ 2006. Work stress, weight gain and weight loss: evidence for bidirectional effects of job strain on body mass index in the Whitehall II study. *International Journal of Obesity*, 30, 982–987.

Lawn, J. E., Rohde, J., Rifkin, S., Were, M., Paul, V. K. and Chopra, M., 2008. Alma-Ata 30 years on: revolutionary, relevant, and time to revitalise. *The Lancet*, 372, 917-927.

Layard, R., Clark, A. and Senik, C., 2011. *The causes of happiness and misery*. In: J. F. Helliwell, R. Layard and J. Sachs, eds. *World Happiness Report*. New York: The Earth Institute, Columbia University.

Link, B. G. and Phelan, J., 1995. Social conditions as fundamental causes of disease. *Journal of health and social behavior*, 80-94.

Marmot, M. G. and Shipley, M. J., 1996. Do socioeconomic differences in mortality persist after retirement? 25 year follow-up of civil servants from the first Whitehall Study. *British Medical Journal,* 313, 1177-1180.

Marmot, M. 2002. The influence of income on health: views of an epidemiologist. *Health Affairs*, 21(2), 31-46.

_____ 2004. *Status syndrome: How your social standing directly affects your health and life expectancy*. London: Bloomsbury Publishing.

McMichael, A. J., 2001. *Human frontiers, environments and disease: past patterns, uncertain futures*. Cambridge: Cambridge University Press.

Miller, D. L., Scheffler, R., Lam, S., Rosenberg, R. and Rupp, A., 2006. Social capital and health in Indonesia. *World Development*, 34(6), 1084-1098.

Moore, M., Gould, P. and Keary, B.S., 2003. Global urbanization and impact on health. *International Journal of Hygiene Environment and Health,* 206(269-278).

Nugent, R., 2008. Chronic diseases in developing countries: health and economic burdens. *Annals of the New York Academy of Science,* 1136, 70-79.

OECD, 2010. *Health care systems: Getting more value for money*. OECD Economics Department Policy Notes, No. 2.

_____ 2012. *OECD Health Data 2012*. http://stats.oecd.org/Index.aspx?DataSetCode=SHA [cited 2012 November 14].

Pai, N. P., Vadnais, C., Denkinger, C., Engel, N. and Pai, M., 2012. Point-of-care testing for infectious diseases: diversity, complexity, and barriers in low- and middle-Income Countrie. *PloS Medicine,* 9(9), e1001306. doi:10.1371/journal.pmed.1001306.

Patel, V., 21 August 2004. Mental health matters. *New Scientist*, 183(2461), 19-19.

Pinquart, M. and Sörensen, S. (2000). Influences of socioeconomic status, social network, and competence on subjective well-being in later life: a meta-analysis. *Psychology and aging,* 15(2), 187.

Post, S. G., 2005. Altuism, happiness, and health: It's good to be good. *International Journal of Behavioral Medicine,* 12, 66-77.

Puchalski, C., 2004. Spirituality in health: the role of spirituality in critical care. *Crit Care Clin,* 20, 487-504.

Putnam, R., 2000. *Bowling Alone: the collapse and revival of the American community.* New York: Simon and Schuster.

Putnam, R., Leonardi, R. and Nanetti, R., 1993. *Making Democracy Work: Civic Traditions in Modern Italy,* Princeton, NJ: Princeton University Press.

Ravishankar, N., Gubbins, P., Cooley, R. J., Leach-Kemon, K., Michaud, C. M., Jamison, D. T. and Murray, C. J., 2009. Financing of global health: tracking development assistance for health from 1990 to 2007. *The Lancet*, 373(9681), 2113-2124.

Rees, W.E., 1992. Ecological footprints and appropriated carrying capacity: what urban economics leaves out. *Environment and Urbanisation,* 4(2), 121-130

Robinson, B.E., Pham, H., 1996. Cost-effectiveness of hospice care. *Clin Geriatr Med,* 12 (2), 417-28

Sachs, J. D., 2011. *The price of civilization: reawakening American virtue and prosperity.* New York: Random House.

Schofield, R., Reher, D. and Bideau, A., 1991. *The decline of mortality in Europe.* Oxford University Press.

Shkilnyk, A. M., 1985. *A poison stronger than love: The destruction of an Ojibwa community.* New Haven: Yale University Press.

Stansfeld, S., Candy, B., 2006. Psychosocial work environment and mental health--a meta-analytic review. *Scand J Work Environ Health,* 32(6), 443-462

Steptoe, A., Dockray, S. and Wardle, J., 2009. Positive affect and psychobiological processes relevant to health. *Journal of personality*, 77(6), 1747-1776.

Steverink, N., Westerhof, G. J., Bode, C. and Dittmann-Kohli, F., 2001. The personal experience of aging, individual resources, and subjective well-being. *The Journals of Gerontology Series B: Psychological Sciences and Social Sciences*, 56(6), 364-373.

Taylor, D. H., Ostermanna, J., Van, C. H., Tulskyc, J. A., & Steinhauserc, K. (2007). What length of hospice use maximizes reduction expenditures near death in the US Medicare population. *Social Science and Medicine,* 65(7), 1466-1478

Thailand National Health *http://en.nationalhealth.or.th/sites/default/files/2_Summary_of_Mainstream_SDH _Across_Health_Sector_Roundatbale_Discussion.pdf*

The-Economist, 2009. Reforming American health care: Heading for the emergency room. *The Economist,* June 25.

Thinley, J. T. 2012, Statement by his excellency Jigmi Y. Thinley, prime minister, Kingdom of Bhutan at the United Nations Conference on Sustainable Development, 20th June 2012, Rio De Janeiro

UC-Atlas-of-Global-Inequality, 2012. *Health Care Spending*. [cited 2012 November 14].

UN-Millennium-Project, 2005. *Investing in development: a practical plan to achieve the Millennium Development Goals. Overview*. London: Earthscan.

UNDP, 2007. *Human trafficking and HIV*. New York: UNDP.

UNICEF, 2008. *State of the World's Children: Child Survival*. New York: UNICEF.

United Nations Department of Economic And Social Affairs (UNDESA) Population Division, 2001. World Population Ageing: 1950-2050. New York: United Nations.

United-Nations, 2008. *World Urbanization Prospects: The 2007 Revision*. New York: United Nations.

Waldman, R. J., 1992. Income distribution and infant mortality. *Quarterly Journal of Economics,* 107, 1283-1302.

Weitzman, E. R., & Chen, Y. Y. (2005). Risk modifying effect of social capital on measures of heavy alcohol consumption, alcohol abuse, harms, and secondhand effects: national survey findings. *Journal of Epidemiology and Community Health*, 59(4), 303-309.

Wikipedia, 2012. *List of countries by life expectancy*.

Wilkinson, R. G. and Pickett, K., 2009. *The Spirit Level: Why Greater Equality Makes Societies Stronger.* Bloomsbury Press.

Wilkinson, R. G., 1996. *Unhealthy societies: the afflictions of inequality.* New York, London: Routelege.

Wilson, E. O., 2002. *The future of life*. Knopf Doubleday Publishing Group.

World Health Organisation, 2007. *Priority public health conditions*. Geneva: Commission on Social Determinants of Health Priority Public Health Condiions Knowledge Network.

World Health Organisation, 2007a. *Everybody's Business: Strengthening Health Systems to Improve Health Outcomes (WHO's Framework for Action)*. Geneva: World Health Organization.

_____ (WHO), 2012. Health and Human Rights. [online]. Available at: http://www.who.int/hhr/en/

_____ 2012a. *Prevention and control of noncommunicable diseases: guidelines for primary health care in low-resource settings*. Geneva: World Health Organization.

_____ 2008. *Closing the gap in a generation: Commission on Social Determinants of Health Final Report.* World Health Organization Commission on Social Determinants of Health.

_____ 2008a. *The Global Burden of Disease: 2004 Update*. Geneva, Switzerland: World Health Organization.

World-Bank, 2005. *China update quarterly*. Beijing: World Bank.

World-Wildlife-Foundation, 2012. *Living Planet Report*. London: World Wildlife Foundation.

Wright, A. A., Zhang, B., Ray, A., Mack, J. W., Trice, E., Balboni, T., ... and Prigerson, H. G., 2008. Associations between end-of-life discussions, patient mental health, medical care near death, and caregiver bereavement adjustment. *JAMA: the journal of the American Medical Association*, 300(14), 1665-1673.

Yates, R., 2009. Universal health care and the removal of user fees. *The Lancet,* 373(9680), 2078-2081.

Yu, W., n.d. End of Life Care: Medical treatments and costs by age, race, and region. HSR&D study IIR 02-189. URI: http://www.hsrd.research.va.gov/research/abstracts/IIR_02-189.htm.

Zhang, B., Wright, A. A., Huskamp, H. A., Nilsson, M. E., Maciejewski, M. L., Earle, C. C., ... and Prigerson, H. G., 2009. Health care costs in the last week of life: associations with end of life conversations. *Archives of Internal Medicine,* 169(5): p. 480-488.

Chapter 10: Education

— Laura McInerney, Toni Noble and Ilona Boniwell

Domain: Education

"Give a man a fish, and you have fed him today. Teach a man to fish, and you feed him for a lifetime": Though the author of the quote is unknown, the maxim is almost universally understood. Education, providing it passes on a skill or knowledge, can change a person's entire future. It is the key to creating new possibilities for creating a safe, socially and ecologically responsible global order that enhances human happiness and well-being of all life. Through education we can capture the hearts and minds of our children and young people to the new development paradigm. Our challenge in education is to develop our young people's capacities as active responsible learners and global citizens who thrive and flourish in the complex world of the 21st century.

This focus on learners' skills and understandings is reflected in the United Nations goals for education: to make people wiser, more knowledgeable, better informed, ethical, responsible citizens who are critical thinkers, and capable of life long learning. The four United Nations pillars of Education for the 21st century offer a paradigm for quality education for all children. The four pillars are learning to live together, learning to know, learning to do and learning to be (Delors, 1996).

Education can also change the way that people view issues, it can affect their ability to get employment, to take care of themselves during sickness, or to think rather than fight their way out of a challenging situation. For this reason education can be seen as the glue between all of the GNH domains.

Existing sub-domains

The sub-domains considered below are with reference to Bhutan as the originator of the GNH. However they are easily generalised to other countries and examples cover countries with differing geographies, politics and economies.

Education attainment

Education attainment matters: it can provide feelings of satisfaction and accomplishment as well as giving access to more satisfying work opportunities (Judge, Ilies and Dimotakis, 2010). The formal education system in Bhutan, for example, developed only recently and qualification systems are particularly new, with certification mostly related to length of time in education rather than

based on testing. While some countries are also still developing their formal systems, in some other countries education attainment is highly complex and can involve a myriad of qualification types and varying attainment levels. Where attainment is more complex it is sometimes labelled as 'achievement' rather than 'attainment'. Increasing levels of achievement have been found to increase an individual's happiness and the overall productivity of a country although this relationship is stronger in developing countries (Jamison, Jamison and Hanushek, 2007).

Questions have been raised regarding the relationship between formal schooling, educational attainment, and 'knowledge' more broadly. For example, years in formal education have expanded in North America, however literacy levels and social capital have arguably remained static or declined (Hirsch, 2003). It is also difficult to assess to what extent the replacement of 'formal knowledge' may reduce knowledge of one's local community or civic literacy (Howe, 2003). For this reason a broader view of 'education attainment' is important, which looks not just at the outcomes of formal learning but also at a more 'general' or cultural knowledge base.

National/local language literacy

The history of language in Bhutan makes the inclusion of literacy a particularly important GNH survey point for the Bhutanese government. A person is rated as literate in the survey if they can read and write in any one language: English, Dzongkha or Nepalese. Literacy matters for educational attainment and achievement, which influence well-being, and it also matters that all languages in Bhutan are included. Studies show that where a person lives in a country with a national language, but speaks a different language – perhaps because of family heritage or a localised dialect - then being able to speak in one's native language *as well as* the separate national language brings feelings of authenticity and greater levels of integration, both of which are important for subjective well-being (Coracini, 2006; Vedder et al., 2006).

Unfortunately statistics suggest that up to half of the world's languages could be lost by the end of the century if current indigenous language loss patterns continue (Moseley, 2009). With the loss of language comes the loss of knowledge embodied within that language – therefore ideas or action specific to a particular community, and important for survival and well-being, are in danger.

Folk and local literacy

Given that Bhutan only recently developed its formal education system, many older Bhutanese people did not experience formal education, but they nevertheless 'learned' throughout their lifetime via informal networks – e.g.

role-modelling from the family, through local stories, etc. The GNH survey attempts to capture this informal education by measuring knowledge of local legends and folk stories traditionally passed through informal means. The sharing of tacit knowledge across generations is important for health and feelings of community cohesion. The five survey questions in this section measure knowledge of: local legends and stories, local festivals, traditional songs, how HIV and AIDs are transmitted, and knowledge of the constitution. Concepts such as the knowledge of HIV transmission are critical for understanding how groups protect themselves against health risks. Unfortunately, there is no body of research so far studying the importance of folk or local historical knowledge for well-being. However a recent study by Stavans (2012) showed that maintaining the oral culture of displaced Ethiopian communities enhanced their confidence and well-being, suggesting that informal customs may have some links with well-being.

As noted above, folk and local literacy also contributes to our understanding of 'education attainment' when broadly defined to incorporate both formal and informal education.

Alternative sub-domains

Length of education

Education attainment in Bhutan is heavily correlated with education length. In other nations education attainment and length of education are separate variables. A person can achieve highly at, say, their school leaving certificate aged 16, yet not continue on to higher levels of education. There is some evidence that satisfaction with life and subjective well-being may therefore relate more heavily to *length* of education rather than attainment (Oreopolous, 2006). It is also the usual case that higher achievement in earlier parts of formal education enables a pathway for accessing higher education but for clarity's sake future surveys (either GNH or any cross-nationally) and policies might usefully disaggregate education attainment/achievement and education length.

Lifelong learning

Formal education and informal education are looked at in the GNH survey. However the assumption is that formal education only considers younger people at school in their compulsory programmes, whereas informal education (provided by family, peers, and mentors) and non-formal education (i.e. swimming lessons, summer camps, etc) are measured through a framework of local knowledge. In some countries creating a unified 'local knowledge' framework will be difficult if the nation is multi-cultural or strongly divided between different cultural groups. Furthermore, many countries provide formal learning opportunities beyond the end of a child's schooling. An additional education proxy may therefore be a measure of 'lifelong learning'. Though there

is no accepted single definition of 'lifelong learning' it can be thought of as the provision of education opportunities for people of an age and at any stage in their life cycle. Studies on lifelong learning often look at the access to and impact of adult learning courses (Hammond, 2004; Simone and Cesena, 2010) or opportunities provided for adults to learn in local schools, e.g. as a parent governor or via parenting classes (Orchard, 2007). Non-formal workplace or on-the-job training also comes under lifelong learning.

Curriculum

Being able to do more things as a result of a learning activity provides greater options for autonomy and deliberate choice in the future, but evidence suggests that the teaching of certain curricular subjects during formal education better improves young people's subjective well-being and helps ward against future mental health problems, e.g. depression. Resilience programmes have had some success in reducing the future likelihood of a young person developing depression (Gillham et al., 2006; Brunwasser, Gillham and Kim, 2009), and personal health or positive psychology curricula are also gaining ground as being an additional way to impact well-being (Durlak and Wells, 1997; Challen et al., 2009; McGrath and Noble, 2011; Boniwell and Ryan, 2012).

Curriculum thought of more broadly as all the learning occurring in a school also means that research considering non-formal education and the practices surrounding schools – e.g. behaviour policies, assemblies and extra curricular activities are also important. A meta-analysis undertaken by the Collaborative for Academic and Social and Emotional Learning (Durlak et al., 2011) of 213 research studies into the effectiveness of school-based social and emotional programs identified that there were significant improvements in students' social-emotional skills and their sense of feeling more connected to their school (Durlak et al., 2011) as a result of participating in Social and Emotional Learning (SEL) programs. The participating schools also documented a 44% decrease in suspensions and a 27% decrease in other disciplinary actions. Academic achievement scores improved by 11 to 17 percentiles that illustrates the strong interdependence of student well-being with student academic learning. The school-based programs were also most effective at increasing academic achievement when taught by the classroom teacher, rather than a visiting specialist. A classroom teacher can embed the program into their classroom and school practices, and integrate the social-emotional learning with the academic curriculum. The teacher can also customise the program for individual student's needs or their class as a whole.

Diekstra (2008) also conducted a meta-analysis of worldwide research studies into the effectiveness of school-based social and emotional learning programs. The study concluded that enhanced social & emotional development is the key

to the overall development of students in terms of their personality, academic progress, school career and societal functioning. Universal whole school-based social and emotional learning programs were seen as highly beneficial for children and adolescents, especially those implemented with students aged between 5 and 13 (ie in primary/elementary schools). Young people from low socio-economic status and different ethnic backgrounds were found to benefit at least as much as other young people (and often more) from social and emotional programs.

Future surveys might therefore consider whether students are accessing a wide variety of curriculum provision and future policies might support initiatives that provide students with access to such positive curricula.

The intrinsic value of the domain

The claim that education is an intrinsically good thing can be supported by observations that achieving in education can feel good. In studies on 'flow' – the euphoric feeling of being fully engrossed in doing something – researchers found that students in lessons get into this zone when the tasks they are doing are moderately challenging for the learner and the right level of feedback is provided (Carli, Della Fave and Massimini, 1988). The positive affect arising from flow is intrinsically rewarding because it *feels* good. Where education provides 'flow' opportunities, education feels inherently valuable.

Speaking and being educated in one's first language increases feelings of authenticity and increases confidence in the education system (Watkins, Razee and Richters, 2012). In studies of Korean immigrants in California, language was so important that perceived language barriers accounted for the variance in health and well-being among the students (Ding and Hargraves, 2009). Literacy can therefore have a significant impact on our physical as well as our subjective well-being.

Folk and local history's impact on well-being is not well studied in the academic literature at present, but folk customs are important because these customary practices often develop to avoid problems of the past, e.g. illnesses or conflicts. Nevertheless, formal education is also important for survival, and in some cases can be even more important than custom. Levang, Dounias and Sitorus (2005) studied tribal groups in Africa and found that tribal groups who moved out of their forest living areas and no longer had the natural resources they previously relied on for survival nevertheless had a declining death rate when compared to forest-dwelling groups who remained in the well-endowed forests but who could not access formal education. Hence, while folk literacy is important and should currently be captured to ensure measurement of education in Bhutan among older generations, the benefits of formal above informal education

should also be understood, and as younger generations become more educated this part of the survey should become less prominent.

From the perspective of 'value' in the pejorative rather than evaluative, 'values' are intrinsic to all that a school does. A starting point in building a supportive, respectful and connected school culture is to help a school community clarify and reach agreement about the values that guide the school's practices. If a school articulates pro-social values through it's vision statement, policies, structures and teaching practices, then these values form a 'moral map' that guides how everyone in the school community interacts and communicates with each other and the positive choices they make. The importance of learning to act in accord with one's pro-social values for sustained well-being in one's youth is illustrated by a longitudinal study that tracked high school students over fifty years into late adulthood. The students were interviewed every ten years and the results demonstrated that 'giving' adolescents became both psychologically and physically healthier adults (Wink et al., 2007). Hence, any education that provides a positive 'moral map' – whether formal, non-formal, or informal in nature – is like to promote intrinsic psychological health.

Instrumental value of the domain

Education matters not just for intrinsic reasons for also for instrumental reasons, e.g. monetary and physical well-being. Academic achievement and the completion of high school leads to greater employability, less reliance on welfare support and a higher likelihood of participation in further education. These outcomes in turn further increase the likelihood of sustained employment, adequate income, higher living standards and self-sufficiency (Department of Premier and Cabinet, 2005; Muir et al., 2003)

In the United States the effect of education quality impacts income growth and mortality rates (Jamison, Jamison and Hanushek, 2007). Improved access to quality education improves income growth due to the likelihood of a country being able to understand, adopt and create new technologies. This adoption of technology brings cognitive and social capital to the individual who through their new skills are more likely to become employed (Granovetter, 1992). It also means individuals spend more on upgrading to new technology which therefore increases a country's GNP. In Mozambique, the presence of an additional adult female completing the first stage of primary school increases household per capita consumption by 18% in rural areas, and the addition of a male completing the second stage of primary school increases household per capita consumption by an additional 12% (Handa, Simler and Harrower, 2004). Maternal education in Mozambique is also strongly associated with the health and nutritional status of preschool children, two variables which consequently impact on a child's likelihood of continuing in education.

The problem of the current economic paradigm, however, is that it uncritically perpetuates the idea that greater consumption is going to increase well-being, whereas it may merely be a consequence of greater education because of the greater financial capital gained as a consequence of more formal education. Hence, while there is an instrumental value of well-being in that an individual may be more able to make decisions and consume more goods, there is also a potential ecological pitfall if more education leads to greater consumption and greater depletion of the world's natural resources.

The instrumental value of educational achievement can spread across generations. If a person's formal educational attainment is low and this impacts their personal well-being this 'unhappiness' can affect their ability to transmit well-being to their child, in turn meaning the child is less likely to have strong school achievement thereby influencing attainment, and so on (Samuel, Bergman and Hupka-Brunner, 2012; Engin-Demir, 2009). This cycle occurs because while education increases well-being, high levels of well-being also appear to increase the probability of successful intergenerational transfer of educational attainment. Raising education attainment levels, or well-being, can therefore both have a positive effect on the other one.

Health is particularly correlated with education in a relationship labelled the 'education gradient' within the health literature. The education gradient refers to the fact that mortality, injury and illness rates are significantly different across groups with different levels of education (Meara, Richards and Cutler, 2008). Part of the difference between groups is explained by more educated people often having greater monetary capital and therefore being more able to access health insurance or effective treatments. However, differences in knowledge and cognitive ability account for 30% of the variance because people with more education typically make more informed choices about their 'health behaviours', i.e. eating, smoking, exercise (Cutler and Lleras-Muney, 2010). Knowledge of HIV/AIDs, as measured in the GNH survey, is an example of important knowledge that helps people avoid risky sexual behaviours that can lead to HIV transmission. Education reduces risky behaviours because people know the consequences of actions and also more alternative strategies for dealing with a situation.

Good health particularly critical for children and adolescents whose health patterns and habits developed during these years often continue into adulthood (Tountas and Dimitrakaki, 2006; WHO, 2008). Individuals with higher rates of education report fewer illnesses and have better mental health and well-being than those with lower levels of education (Turrell et al., 2006). Schools can have a direct and indirect impact on student health and well-being - for example schools can directly teach the benefits of good nutrition and exercise and the

adverse effects of substance abuse and smoking. However it is also likely that non-formal and informal education will matter – for example, the attitudes and knowledge of parents towards food is likely to influence the eating behaviours developed by children (Campbell et al., 2012).

Traditional public policy

Traditionally, national education policy debates are most frequently about a country's competitiveness in terms of skills (particularly reading, maths and science), or the debate focuses on the country's ability to produce economically productive workers through its education system. Few countries pay serious regard to debates about education's influence on intrinsic well-being though much discourse is tangentially related to physical and monetary well-being through discussions of education's impact on employment or government expenditure in other public services (e.g. crime or health).

Traditional education policies also focus on children aged up to 18 (or younger in countries with more limited formal education access). Mainly debates centre on the access to and quality of the compulsory education system. Wealthier nations are somewhat fixated on data comparing the abilities of their nation's pupils on standardized tests, mostly in the areas of reading, writing, mathematics and scientific knowledge. The three studies most commonly quoted are the Third International Mathematics and Science Study (TIMSS), the Programme for International Student Assessments (PISA) and the Progress in International Reading Literacy Study (PIRLS). The 2012 Pearson report, "The Learning Curve" used all three measures to create an overall index of cross-national educational attainment (Economist Intelligence Unit, 2012). Approximately 150 countries do not currently take part in the studies; the suggestion is that at present they would score far below thresholds require for their inclusion to be statistically possible when standardising scores (Naumann, 2005).

Using these comparative indices, countries 'copy' the top-performing countries, especially their policies on teacher training, teacher pay, national curriculum and annual standardised testing for school accountability purposes (Breakspear, 2012). A discourse regarding the impact of such policies on students' well-being is almost entirely missing. This absence is problematic as there is some evidence that systems of high-stakes examinations combined with a culture of strong parental pressure can result in substantially reduced well-being for young people (Qin, 2008). Yang and Shin (2008) found that the desire of Korean parents for their children to achieve highly meant that their children's developmental needs for leisure, pleasure and sleep as well as their psychological and emotional well-being needs were ignored. On the other hand, one of the most continually high performing countries is Finland – a country

that also scores highly on well-being and academic measures (Chapple and Richardson, 2009). Finland's success is an opportunity for marketing the importance of well-being more widely and, if considered correctly, government desire to appear 'top of the league' table in well-being provides a strong incentive for countries to promote well-being.

One potential downside of using countries' desires to move up achievement league tables by creating a 'World Class Well Being' measure similar to TIMSS or PISA, is that it might unhelpfully invoke feelings of supremacy or nationalism and detract from considerations about the global interdependence of well-being. It also sends the wrong message, placing those with the greatest economic consumption at the top of the league, when those at the bottom may actually be more ecologically sustainable, or higher on other measures of well-being such as 'family' or 'local knowledge'. League tables, unfortunately, can have the perverse incentive of causing isolationism rather than positive collaboration and could harm the ability of a country currently struggling to meet standards to do so in the future if another country felt its entry into the league might jeopardise their own standing (Alexander, 2010).

A second traditional characteristic of education policy is the concept of 'returns on investment' – usually calculated as a cost-benefit of education policies and which equates cost spent on education with economic productivities recouped or saved 'averted' costs. For example, the Chicago Longitudinal Study is a longitudinal cost-benefit analysis of Chicago Child-Parent Centres that provided additional schooling for low-income young people aged 3-20 during the 1980s and 1990s. Young people who received the additional schooling are now 26. The most recent report showed the pre-school program has provided a total return to society of $10.83 per dollar invested, and the school age programme returned $3.97 per dollar invested (Reynold et al., 2011). The researchers calculated the return on investment by accounting for earnings, taxation and 'averted criminal justice costs' including prison or legal services. What are not calculated however are either aspects of well-being nor other dimensions of the GNH such as health. Therefore cost-benefits may look at savings via employment and crime, but fail to take into account the impact on – say – less negative mental health problems or more improved environmental behaviours that children who received more education might demonstrate.

A third traditional characteristic of education policy is a focus on 'schooling' (or 'formal education') above non-formal or informal education. The latter spaces are less easily defined and less easily managed, for this reason they are therefore often ignored in favour of studies analysing formal education and considering impacts on income, GDP and consumption rather than more esoteric concepts such as civic literacy or kinship.

Major research findings of potential relevance to new public policy

New public policy about education could take a lead from the OECD studies on child well-being. The OECD gathers multi-dimensional indicators of child well-being and compares them across several nations. One of the six dimensions included is education and it is measured by looking at the resources available to young people for education purposes, e.g. a desk, a quiet place to study, a computer, internet access, textbooks, calculator and dictionary. Rated in this way only one in 200 children in Iceland or Germany are educationally deprived. In Mexico and Turkey more than 10% of the population can access only four or fewer of the eight educational items. Though only a basic measurement, these items can affect a person's well-being.

These measures are, however, primarily consumption related and may therefore repeat the mistakes of a previous paradigm. An alternative measure developed by GPI Atlantic instead draws on the OECD's "core competencies" to develop non-instrumental learning goals, such as knowledge of ecology, nutrition and the media (Panozzo, Hayward and Colman, 2008). Such alternatives would encourage a genuinely new paradigm based on knowledge of intrinsic importance which also relate to other GNH domains, such as health or leisure.

Any new policy paradigm regarding education should also focus on educational *equality* if well-being is to be promoted. Access to education in many countries is different based on a child's gender, with females far less likely to access education than boys (Hausmann, Tyson and Zahidi, 2008). Given the impact of maternal education on children's future educational achievement, health and well-being, then limiting female access to education is very likely to cause persistent inter-generational problems. Furthermore, where women have unequal access to the workplace – a usual consequence of unequal educational access – they are more likely to be in poverty, and have higher rates of depression, anxiety and suicide (Gaviria and Rondon, 2010). Sahn and Younger (2006) argue that reducing educational inequality is so powerful that benefits well-being even if income inequality in a nation is still growing. For example, within Latin America the income gap between top and low earners is increasing, however educational inequality is shrinking and therefore well-being in the nation remains at least static. Disrupting the reproduction of inequality based on wealth is also possible. In Mexico, wealth in the childhood home is a major factor in explaining educational level and socio-economic well-being, both of which are likely to influence subjective well-being; in Chile, however, a child's well-being and attainment is more affected by their parent's education than it is by their parents' level of wealth (Wong, 2012). If all people in a country can access the same level of education, then the benefits conferred from having an educated person in their household will be equally distributed.

Policies designed to promote equal educational access will therefore increase well-being for an individual and also increase the likelihood of intergenerational transfer of that well-being.

This is not to say that wealth inequalities do not matter. They matter substantially, with strong correlations between family income and educational attainment, as well as wealth being correlated with many other GNH domains (Wilkinson and Pickett, 2009). A new policy paradigm will therefore work to address this inequality.

Once people have equal access to education, however, it is possible that they would still not experience subjective well-being. Life satisfaction is impacted by the achieving of our own goals, whether those are short-term individual goals (e.g. "I would like some food") or longer-term career identity goals (e.g. "I want to become a doctor"). When young people's needs for relationships, positive parenting or physiological requirements, e.g. food and sleep, are not met then this is detrimental to well-being. Unfortunately the pressures of some education systems, especially in countries with high-stakes exams such as China and Korea, means the well-being of young people is being adversely affected (Yang and Shin, 2008). A more positive environment in schools must be created to rebalance these stressors.

Recommendations

What not to do

Two factors appear to cause considerable harm within education policies: overt stress placed on young people in high-stakes examinations and inequality in accessing education. Policies reinforcing either idea could become damaging. Measures of well-being must therefore be careful not to promote an over-idealistic notion that a country can become better at something simply by forcing people to focus on it. One would not wish for a situation where a country, by overly focusing on well-being, actually undermines well-being.

What to do

a. Ensure equal access to education for all children, regardless of gender or wealth. This is absolutely imperative for the health and well-being of future generations.
b. Develop metrics that test education as a broader concept rather than merely the outcome of 'schooling', Metrics such as those developed by GPI Atlantic media (Panozzo, Hayward and Colman, 2008) and the OECD's development of "core competencies" should provide alternatives to measuring 'educational success' which are more rounded and sustainable than those related to employment, GDP and consumption.

c. Create guidelines for the responsible reporting and use of performance tables regarding student's academic skills. The pressures felt by young people to perform to a high degree to satisfy adult needs is very strong in some countries. Two things contribute to this pressure: One is a strong feeling that the only way to have a monetarily secure future is educational achievement while young, and the second is a message from the government that the country is being let down if their children are not 'winning' at international tests of literacy and numeracy. From the perspective of political and governmental will the creation of guidelines regarding reporting and the use of cross-national data would help ensure ethical reporting of the international studies and ease stress. With regard to parent pressure it would help if governments encouraged and promoted lifelong learning opportunities, rather than 'one-shot' education systems where students are given 'one-shot' at exams at a specific point in time. This would reduce the pressure on children to perform when young. Cultural shift on this issue however is unlikely to be easy.

d. Encourage countries to develop a 'national policy' on student well-being which promotes a holistic education of the whole child; encourages a whole school approach that engages the entire community; and which works from a positive 'strengths-based' rather than deficit-based approach. Opportunities in formal and non-formal schooling would include access to activities which develop psychological capabilities that promote well-being, e.g. resilience, social-emotional competencies, critical, creative and ethical thinking as well as developing broader cultural knowledge in civics, nutrition, and finance.

e. Provide access to a broad set of experiences in schooling that will allow students to experience 'flow' – i.e. a sense of being 'lost' in a moment because the activity is inherently engaging. Some children do achieve flow in academic work, however it is also commonly achieved through sports, music and other non-formal education opportunities. Traditional public policy in education often focuses on results in academic subject areas, however providing access to these other opportunities could promote greater levels of subjective well-being.

Processes for building policy

Education is often a national or regional policy however it is important that education policies involve local communities in consultations on changes. The research showing the importance of authenticity to local culture and language in education suggests that changes which only provide one 'mono-national' system may be unsuitable and can undermine the education of minority ethnic, language or cultural groups.

Examples such as the Australian National Safe Schools Framework (NSSF) launched in 2004 and revised in 2011 as a response to concerns about school bullying, harassment and violence also show how important it is to seek agreement, evidence and build consensus in order to make changes in education which promote student well-being. Almost 90% of the educational 'experts' and over 95% of the school practitioners involved in feedback on the framework considered the following factors as 'very important' or 'important' to the successful implementation of a student well-being framework.

- Strong systemic and school leadership and a strategic plan
- Developing a collaborative whole school student well-being strategic plan
- Providing ongoing and wide-reaching professional learning opportunities for teachers
- Planning for parental involvement

Practitioners also reported that building common agreement of key elements in the education policy, reflecting research evidence, building on work in local communities and encouraging schools to develop their own pathways were also critical to the success of well-being policies.

Involvement in policy creation is also an opportunity for people to learn. Castro and Camp-Redondo (2006) found that ICT can help people be included in the policy process. By using online technologies such as Policy Delphi methodology ordinary citizens can give voice to their ideas about education (Turoff, 1970). This sort of inclusion in the process then educates people further on the process of politics and democracy, thereby ensuring learning *through* the policy creation process as well as creating policy *for* the purpose of expanding learning.

Urgent priorities

The two areas of most pressing need are the adequate measurement of educational well-being and improvements in educational equality. Many groups are already measuring educational well-being (e.g. GPI Atlantic, the OECD, the New Philanthropy Capital group, and many academics) but more co-ordinated cross-national approaches would benefit nations in identifying countries with good practice of well-being in their education system.

In terms of educational equality, some areas are already moving quickly to address imbalances. For example, in 2007 Uganda became the first sub-Saharan country to offer universal secondary education however there are currently not enough schools built. Social enterprises such as PEAS Africa are now funding the building of schools so that central government funds can then be used for day-to-day education. Where food is provided at school and security risks are

minimized (e.g. the building is safely built, and the children feel safe at school) there is evidence that attendance in the schools increases (Stith, Gorman and Choudhury, 2003). More research and funding for both well-being measurement and opportunities for building schools would help further goals of well-being and the UN Millennium Goals on education (United Nations, 2012).

Barriers to implementation

Institutional factors

Many countries pride themselves on the importance of education for their culture and productivity and it is inescapably true that social progress in many countries has been delivered through education. However persisting imbalances in education are often borne out of a religious view that women are inferior or, because their 'proper' role is in domestic work, then their need for education is more limited. Such strong cultural and religious values suffuse many institutions within such a country, e.g. in laws and welfare systems, and are usually strongly held by education stakeholders – e.g. teachers, administrators, parents. Changing these institutions is likely to be a lengthy and difficult challenge, though not an impossible one. Few countries that now have equal education access for males and females started out that way. It is only within the past 150 years that America and Western European countries evened out educational access among genders; while progress may be slow, nations may yet develop more equal formal education if pushed to do so.

With regard to the pressure of parents and governments, countries that use high-stakes knowledge-heavy exam systems are currently looking towards countries with better well-being or with more creative school curricula, aware that these qualities can improve their education system and, possibly, the productivity of workers. This change has been most evident in Shanghai and Hong Kong, both of whom have developed more 'creative' curriculum in recent years (OECD, 2010)

Political

Many nations now use the international education test league tables as a way of marketing their successes (or the opposition's failures) in times of elections (Breakspear, 2012). Politicians' habits of focusing solely on traditional academic skills will be a barrier to implementing any new public policy paradigm on education. Thinking of new ways to frame education policies is paramount for winning over political support for a new public policy paradigm rooted in well-being.

The popularity of in-group/out-group policies is also problematic for ensuring that local languages and folk histories are retained in the education systems of

countries with historically divided communities. Retaining a first language and traditional customs is important for people's well-being but historical conflicts sometimes mean countries are unhappy to support the teaching of knowledge from another culture in state-funded schools. A recurring example is in the choice of acceptable languages for school instruction in countries with bilingual communities, e.g, Belgium, Canada, and Hong Kong. Politicians wishing to gain the largest vote often trumpet the teaching of the majority language or culture and posit a reduction in resources for other languages by arguing that its teaching is vital for overall social integration. While integration undoubtedly works better when all students are educated in a national culture, it is also important that space is provided for appreciating a student's initial language and customs. For example Bhutan has included this space within the GNH. Arguably, any successful education policy paradigm wishing to encompass well-being will need also to be locally aware and encompass these different ideas. If politicians push back and require the paradigm to tout 'nationalistic' principles, then the education policy paradigm will be undermined.

Economic and financial barriers

In Uganda funds are now available for universal secondary education. However there is not always capital available for school building and even where a local school is built families cannot always afford to have their child away from the house all day; they are needed for domestic chores that bring in money for the family (Gelli, Meir and Espejo, 2007). In other countries education is still limited, especially beyond the primary years. Without finance in the right places, educational access is therefore stunted and future monetary growth and well-being is diminished for children who do not continue at school.

In other countries education is increasingly becoming a privately financed affair. In the US effective schools chains, such as the Knowledge Is Power Program (KIPP) school network, are funded primarily through government taxation but are also supplemented by enormous philanthropic campaigns or sponsorships. Countries who reform their system to allow state-funded 'independent schools' typically involve a number of private capital backers or involve business tie-ins – e.g. textbook publishers will fund school buildings if schools agree to sign long-term textbook deals with the one publisher. In these countries well-being may well only make it onto the government agenda if it is felt that philanthropists will align with it or businesses could profit from it.

Human resources

Increasingly better education means that the generation currently in education are inevitably the most well-educated. If there are not enough older educated people available to teach younger people, it can lead to teacher shortages and if

the young are rapidly overtaking the older generation in schools this can lead to high rates of unemployment amongst the over-50s.

Improving teacher quality has been the particular focus of education policies in many countries, with Finland and Singapore focusing on getting the most academically qualified people into school teaching, with some evidence that more highly qualified teachers improve student achievement and have better relationships with students.

Policy actions

Case Study 1: The Australian Safe Schools Framework (NSSF)

A national school policy that focuses the attention of both Government ministers and school leadership to the crucial role of schools in promoting student well-being and resilience is illustrated by the Australian Government's (2011) National Safe Schools Framework; a framework endorsed by all State Ministers of Education and distributed to all schools in the nation. This policy appears to be a world first in guiding all schools' curriculum and practices and highlights the Australian Government's endorsement of the important role of student well-being for learning and achievement. A safe and supportive school is described in the following way:

In a safe and supportive school, the risk from all types of harm is minimised, diversity is valued and all members of the school community feel respected and included and can be confident that they will receive support in the face of any threats to their safety or well-being.

The Framework identifies the following nine elements to assist schools in fulfilling this vision:
1. Leadership commitment to a safe school
2. Supportive and connected school culture
3. Policies & practices
4. Professional learning (Teacher education)
5 Positive behaviour management approaches
6. Engagement, skill development and a safe school curriculum
7. A focus on student well-being and student ownership
8. Early intervention and targeted student and family support
9. Partnerships with families, community agencies and the justice system.

Schools are encouraged to conduct an online evaluation of their school's strengths and limitations based on these nine elements. The Framework provides examples of many evidence-based practices and resources for enhancing their school's capabilities for whole school, staff and student well-

being and school-community partnerships. An online 'safe schools hub' to support schools and teachers in their implementation of the Framework includes case studies of schools that place a high priority on sustained student well-being.

Case Study 2: Teaching Strategies for Thinking Skills & Social-emotional learning

The following strategies all combine critical, creative and ethical thinking skills, social-emotional skills and employ cooperative learning (McGrath and Noble, 2010). The topics the children research and discuss could readily be issues that contribute to their understanding of ecological sustainability and a just and peaceful local and global community.

Ten Thinking Tracks is a sequenced cooperative problem-solving/decision making scaffold where students work in groups. Each student in the group takes turns in leading the discussion and recording their group's answers in relation to two or three tracks. The tracks challenge children to think of the bright side, the down side, their feelings, suggest improvements, think ethically and to consider issues of social justice and finally to negotiate a group solution eg patenting of seeds so farmers have to buy their seeds.

Multi-View encourages perspective taking and empathy. Students consider a problem such as cyber-bullying, organ donation or the case of the Kerala women against Coca Cola plant from different people's perspectives.

Under the Microscope encourages students to explore a controversial issue through different lens that includes their responsibility and the impact of the issue or event on their own lives and on others lives.

Cooperative Controversy provides a scaffold for conflict resolution. Students work in groups of 4 where pair A identifies two arguments in support of a topic-related controversial proposition and pair B identifies two arguments against it. Each pair presents their arguments to the other pair. Then each pair's perspective is reversed and pair A thinks of new disadvantages and pair B advantages. Finally the group of 4 negotiate the strongest argument for and against.

In *Socratic circles* half the class becomes the inner circle as discussants and the other half work in the outer circle as observers. The observers have a checklist to provide constructive feedback to the discussants on the quality of their thinking and their use of social-emotional skills. The two groups then swap roles and responsibilities.

> **Case Study 3**: University of the Third Age
>
> The University of the Third Age is an international organization that aims to educate and stimulate retired members of the community, also known as people in the 'third age' of life. The organization is commonly referred to as U3A and though started in France in 1973, the movement spread across the UK, USA, South Africa and Australia. In 1993, U3A created an 'online university' with courses targeted at older people and focused on providing community to people who otherwise could not get to a physical university. Similar to organizations such as The Open University, U3A have pioneered the way for traditional universities who are now opening access to their courses through 'MOOCs' – Massive Open Online Courses – whereby anyone with an internet connection can connect to others through online conferencing software. Online learning opportunities like these not only provide employment-enhancing skills to people across all generations, but the learning experience they provide can bring a sense of community and increase social capital, especially where users have previously been marginalized in the education system, perhaps because of a disability or lack of funds.
>
> Policies designed to ensure access to virtual schools provide a cost-effective way of helping people have the benefits of learning without the requirements for physical infrastructure which that so often held up learning in the past. Providing internet facilities in local libraries, sponsoring the reconditioning of old computers so they can be sold more cheaply within needy communities and free training courses for adults hosted by schools and teaching about new technologies all encourage greater involvement with online education and could bring about greater lifelong learning.

Data and measurement for policy

The three education-related areas in the GNH survey are: education attainment, folk/local history and local/national language. Education attainment is already widely measured; however folk history and local language are less commonly measured. Language is shown to have implications for well-being and information on access to education in one's native language could therefore form part of a multi-dimensional measure on education for well-being purposes.

Other indicators for child well-being are also possible. As discussed previously, GPI Atlantic have already created measures of literacies focusing on knowledge central for intrinsic well-being. The NCP "Feelings Count" measure also includes broader aspects of 'education' such as feelings, relationships, self-esteem, resilience and environment.

These scales, along with most other well-validated instruments, are currently only available in English. Rolling out a new public policy paradigm in several countries would require questionnaires to be validated in other languages, however there has already been some success with this in other well-being scales suggesting it is possible that any agreed questionnaires could also operate across multiple languages (Franz et al., 1998; Bravo, Gaulin and Dubois, 1996).

Linking levels of education attainment and years in education to measures of non-income well-being would strengthen arguments made for improving education in ways that take account of children's social and emotional, as well as cognitive, needs. Studying whether well-being relates to lifelong learning could also lend support to organizations considering working with lifelong agencies to improve adult learning e.g. U3A or Coursera.

Monitoring

It is perfectly possible for the impact of education on well-being to become part of the remit of any institution already charged with responsibility for education within a country's national or local governments. Gaining the political will to carry out the actions involved is a bigger issue. The United Nations' Millennium Development Goal already asks governments to work towards girls being more equal in education. However much of the pushback is from within communities among people who had little education themselves.

As education moves forward to develop a paradigm that is about equal educational access, delivered more broadly and with a broader set of aims there is likely to be difficulty in getting people to agree. Agreement among stakeholders, setting out principles for education, and ensuring that outcomes can be measured in ways that transcend GDP and look instead towards a 'more educated' rather than simply a 'more wealthy' country will therefore be important.

References

Alexander, R. J. 2010. 'World class schools'–noble aspiration or globalized hokum? *Compare*, 40(6), 801-817.

Boniwell, I. and Ryan, L. 2012. *Personal well-being lessons for secondary schools: positive psychology in action for 11 to 14 year-olds.* Oxford: The Open University Press.

Bravo, G., Gaulin, P., and Dubois, M. F., 1996. *Validation d'une helle de biene gal aupr d'une population francophone de 50 75 ans*. *Canadian Journal of Aging* , 25(15), 122-8.

Breakspear, S. 2012. The policy impact of PISA: an exploration of the normative effects of international benchmarking in school system performance, *OECD Education Working Paper 71*

(http://search.oecd.org/officialdocuments/displaydocumentpdf/?cote=E DU/WKP(2012)8&docLanguage=En) *Retrieved July 20 2012.*

Brunwasser, S. M., Gillham, J. E. and Kim, E. S., 2009. A meta-analytic review of the Penn Resiliency Program's effect on depressive symptoms. *Journal of Consulting and Clinical Psychology*, 77(6), 1042.

Campbell, K. J., Crawford, D. A., Salmon, J., Carver, A., Garnett, S. P. and Baur, L. A., 2012. Associations between the home food environment and obesity-promoting eating behaviors in adolescence. *Obesity*, 15(3), 719-730.

Carli, M., Della Fave, A. and Massimini, F., 1988. The quality of experience in the flow channels: Comparison of Italian and US based students. In: M. Csikszentmihalyi and I. S. Csikszentmihalyi, eds. 1988. *Optimal experience: Psychological studies of flow in consciousness*. New York: Cambridge.

Castro, J. A. and Campo-Redondo, M. S., 2006. Tecnologías de Información: Indicadores de la inclusión digital. *Revista Venezolana de Gerencia*, 11(33), 49-73.

Challen, A., Noden, P., West, A. and Machin, S., 2009. UK Resilience Programme Evaluation. (https://www.teachers.tv/publications/eOrderingDownload/DCSF-RR094.pdf) *Retrieved October 02 2010.*

Chapple, S. and Richardson, D., 2009. *Doing better for children*. (http://www.oecd.org/social/familiesandchildren/43570328.pdf) *Retrieved October 10 2010*

Coracini, M. J. R., 2006. L'espace hybride de la subjectivité: le bien-être entre les langues. *Langage et société*, (3), 41-61.

Cutler, D. M. and Lleras-Muney, A., 2010. Understanding differences in health behaviors by education. *Journal of health economics*, 29(1), 1-28.

Delors, J., 1996. Learning. The Treasure Within. Report to UNESCO of the *International Commission on Education for the Twenty-first Century.*

http://unesdoc.unesco.org/images/0010/001095/109590eo.pdf

Department of Premier and Cabinet, 2005. Better outcomes for disengaged young people: Initial scoping, analysis and Policy review. *DESCS SA Government*

Diekstra, R., 2008. Effectiveness of school-based social and emotional education programmes worldwide- .part one, a review of meta-analytic literature. In *Social and emotional education: an international analysis.* Santander: Fundacion Marcelino Botin. 255-284

Ding, H. and Hargraves, L., 2009. Stress-associated poor health among adult immigrants with a language barrier in the United States. *Journal of Immigrant and Minority Health*, 11(6), 446-452.

Durlak, J. A. and Wells, A. M., 1997. Primary prevention mental health programs for children and adolescents: a meta-analytic review. *American journal of community psychology*, 25(2), 115-152.

Durlak, J.A., Weissberg, R.P., Dymnicki, A.B., Taylor, R.D. & Schellinger, K.B., 2011. The

impact of enhancing students' social and emotional learning: a meta-analysis of school-based universal interventions. *Child Development,* 82(1), 405-432

Economist Intelligence Unit, 2012. *The learning curve: lessons in country performance in education* (http://thelearningcurve.pearson.com/) *Retrieved December 8 2012.*

Engin-Demir, C., 2009. Factors influencing the academic achievement of the Turkish urban poor. *International Journal of Educational Development*, 29(1), 17-29.

Franz, M., Lemke, M. R., Meyer, T., Ulferts, J., Puhl, P. and Snaith, R. P., 1998. German version of the Snaith-Hamilton-Pleasure Scale (SHAPS-D). Anhedonia in schizophrenic and depressive patients]. *Fortschritte der Neurologie-Psychiatrie*, 66(9), 407.

Gaviria, S. L. and Rondon, M. B., 2010. Some considerations on women's mental health in Latin America and the Caribbean. *International Review of Psychiatry*, 22(4), 363-369.

Gelli, A., Meir, U. and Espejo, F., 2007. Does provision of food in school increase girls' enrollment? Evidence from schools in sub-Saharan Africa. *Food & Nutrition Bulletin*, 28(2), 149-155.

Gillham, J. E., Reivich, K. J., Freres, D. R., Lascher, M., Litzinger, S., Shatté, A. and Seligman, M. E., 2006. School-based prevention of depression and anxiety symptoms in early adolescence: a pilot of a parent intervention component. *School Psychology Quarterly*, 21(3), 323.

Granovetter, M., 1992. The sociological and economic approaches to labor market analysis: a social structural view. *The sociology of economic life*, 233-63.

Grosse, M., Harttgen, K. and Klasen, S., 2008. Measuring pro-poor growth in non-income dimensions. *World Development*, 36(6), 1021-1047.

Hammond, C., 2004. Impacts of lifelong learning upon emotional resilience, psychological and mental health: fieldwork evidence. *Oxford Review of Education*, 30(4), 551-568.

Handa, S., Simler, K. and Harrower, S., 2004. *Human capital, household welfare, and children's schooling in Mozambique* (Vol. 134). International Food Policy Research Inst.

Hausmann, R., Tyson, L. D. and Zahidi, S., 2008. The global gender gap report 2008. World Economic Forum.

Hirsch Jr, E. D., 2003. Reading comprehension requires knowledge — of words and the world. *American Educator,* 27(1), 10-13.

Howe, P., 2003. Electoral participation and the knowledge deficit. *Electoral insight*, 5(2), 20-25.

Jamison, E. A., Jamison, D. T. and Hanushek, E. A., 2007. The effects of education quality on income growth and mortality decline. *Economics of Education Review*, 26(6), 771-788.

Judge, T. A., Ilies, R. and Dimotakis, N., 2010. Are health and happiness the product of wisdom? The relationship of general mental ability to educational and occupational attainment, health, and well-being. *Journal of Applied Psychology*, 95(3), 454.

Levang, P., Dounias, E. and Sitorus, S., 2005. Out of the forest, out of poverty? *Forests, Trees and Livelihoods*, 15(2), 211-235.

Lleras-Muney, A., 2005. The relationship between education and adult mortality in the United States. *The Review of Economic Studies*, 72(1), 189-221.

McGrath, H., and Noble, T., 2011. *BOUNCE BACK! A Wellebing & Resilience Program.* Melbourne: Pearson Education.

_____ 2010. *HITS and HOTS. Teashing + Thinking + Social Skills.* Meloburne: Pearson Education.

Meara, E. R., Richards, S. and Cutler, D. M., 2008. The gap gets bigger: changes in mortality and life expectancy, by education, 1981–2000. *Health Affairs*, *27*(2), 350-360.

Moseley, C. and Nicolas, A., 2009. *Atlas of the World's Languages in Danger*. Unesco Pub.

Muir, K., Maguire, A., Slack-Smith, D. and Murray, M., 2003. *Youth unemployment in Australia: a contextual, governmental and organizational perspective.* Sydney: The Smith Family.

Naumann, J., 2005. TIMSS, PISA, PIRLS and low educational achievement in world society. *Prospects*, 35(2), 229-248.

OECD, 2010. Strong performers and successful reformers in education: lessons from PISA for the United States, Retrieved 5 January 2013, http://www.oecd.org/countries/hongkongchina/46581016.pdf

Orchard, L., 2007. Evaluating parenting classes held at a secondary school. *Research in Post-Compulsory Education*, 12(1), 91-105.

Oreopoulos, P., 2006. The Compelling Effects of Compulsory Schooling: Evidence from Canada *Canadian Journal of Economics,* 39(1), 22-52.

Pannozzo, L., Hayward, K. and Colman, R., 2008. *How educated are nova scotians? Education indicators for the Nova Scotia Genuine Progress Index*. GPI Atlantic.

Qin, D. B., 2008. Doing well vs. feeling well: Understanding family dynamics and the psychological adjustment of Chinese immigrant adolescents. *Journal of Youth and Adolescence*, 37(1), 22-35.

Reynolds, A. J., Temple, J. A., White, B. A., Ou, S. R. and Robertson, D. L., 2011. Age 26 cost–benefit analysis of the child-parent center early education program. *Child development*, 82(1), 379-404.

Sahn, D. E. and Younger, S. D., 2006. Changes in inequality and poverty in Latin America: looking beyond income to health and education. *Journal of Applied Economics*, *9*(2), 215-233.

Samuel, R., Bergman, M. M. and Hupka-Brunner, S., 2012. The interplay between educational achievement, occupational success, and well-being. *Social Indicators Research*, 1-22.

Simone, P. M. and Cesena, J., 2010. Student demographics, satisfaction and cognitive demand in two lifelong learning programs. *Educational Gerontology*, 36(5), 425-434.

Stavans, A., 2012. Language policy and literacy practices in the family: the case of Ethiopian parental narrative input. *Journal of Multilingual and Multicultural Development*, 33(1), 13-33.

Stermac, L., Elgie, S., Dunlap, H. and Kelly, T., 2010. Educational experiences and achievements of war-zone immigrant students in Canada. *Vulnerable children and youth studies*, 5(2), 97-107.

Stith, A. Y., Gorman, K. S. and Choudhury, N., 2003. The effects of psychosocial risk and gender on school attainment in Guatemala. *Applied Psychology*, 52(4), 614-629.

Tountas, Y., Dimitrakaki, C.,2006. Health education for youth. *Pediatr Endocrinol Rev* 3(1), 222-225

Turrell, G., Stanley, L., and al., 2006. Health inequalities in Australia: morbidity, health behaviours, risk factors and health service use. Canberra, Queensland University of Technology & Australian Institute of Health and Welfare.

Turoff, M., 1970. The design of a policy Delphi. *Technological forecasting and social change*, 2(2), 149-171.

United Nations, 2012. *The Millennium Development Goals Report 2012*. http://www.un.org/millenniumgoals/pdf/MDG%20Report%202012.pdf Retrieved December 27 2012.

Vedder, P., Horenczyk, G., Liebkind, K. and Nickmans, G., 2006. Ethno-culturally diverse education settings; problems, challenges and solutions. *Educational Research Review*, 1(2), 157-168.

Watkins, P. G., Razee, H. and Richters, J., 2012. 'I'm telling you... the language barrier is the most, the biggest challenge': Barriers to education among Karen refugee women in Australia. *Australian Journal of Education*, 56(2), 126.

WHO, 2008. World Health Organization. The Global Burden of Disease – 2004 update. Retrieved December 1st, 2011 from: http://www.who.int/healthinfo/global_burden_disease/GBD_report_200 4update_full.pdf

Wilkinson, R. and Pickett, K., 2009. *The spirit level: Why greater equality makes societies stronger.* Bloomsbury Press.

Williams, S., MacMillan, H. and Jamieson, E., 2006. The Potential Benefits of Remaining in School on the Long–Term Mental Health Functioning of Physically and Sexually Abused Children: Beyond the Academic Domain. *American journal of orthopsychiatry*, 76(1), 18-22.

Wink, P., Dillon, M., 2007. Do generative adolescents become healthy older adults?

In: altruism and health: Perspectives from empirical research (43-55). S.G. Post (Ed.), New York, NY, US: Oxford University Press

Wong J.E.H., 2012. El rol de la educación en la movilidad social de México y Chile: ¿La desigualdad por otras vías? *Revista Mexicana de Investigacion Educativa*, 17 (52), 65-88.

Yang, S. and Shin, C. S., 2008. Parental attitudes towards education: what matters for children's well-being? *Children and Youth Services Review*, 30(11), 1328-1335.

Chapter 11: Education and Student Wellbeing

— Professor Toni Noble

Education is the transmission of civilization.

~ Will Durant

It is a greater work to educate a child, in the true and larger sense of the word, than to rule a state.

~ William Ellery Channing

Introduction

Our children are our future. Education is the key to creating new possibilities for creating a safe, socially and ecologically responsible global order that enhances human happiness and wellbeing of all life. Through education we can capture the hearts and minds of our children and young people to the new development paradigm. Our challenge in education is to develop our young people's capacities as active responsible learners and global citizens who thrive and flourish in the complex world of the 21st century.

Educational goals and skills for the 21st century

All educators in both developing countries and developed countries understand that change is the hallmark of history but the exponential rate of change in the 21st century demands new goals for education to help our children and young people flourish. To gain support from educators worldwide in developing sustainable happiness and wellbeing for the children and young people in our schools it seems prudent to consider how this goal meshes with current goals for education in the 21st century. There is now a consensus in education that a focus only on learners' acquisition of discipline knowledge is now out of kilter with the needs of learners in the 21st century.

This focus on learners' skills and understandings is reflected in the United Nations goals for education: to make people wiser, more knowledgeable, better informed, ethical, responsible citizens who are critical thinkers, and capable of life long learning. The four United Nations pillars of Education for the 21st century offer a paradigm for quality education for all children. The four pillars arelearning to live together, learning to know, learning to do and learning to be (Delors et al., 1996). These four pillars are described here and developed further to align with the New Development Paradigm and other frameworks on educational skills for the 21st century.

Learning to live together includes explicitly teaching young people the values that connect people, build relationships, strengthen communities and enhance their acceptance and valuing of social, cultural and religious diversity. Learning to live together is also understanding the critical interdependence of our local and global community and learning how to collaboratively work with others on a common goal or project. This pillar extends to developing learners as active and informed citizens whoact with moral and ethical integrity and develop into responsible local and global citizens.

Learning to know is more concerned with helping young people learn how to learn and much less with the acquisition of structured discipline knowledge. Learning how to learn refers to developing learners' skills in using effective learning strategies such as the capacity for critical thinking, and using sound evidence in support of their argument, in solving problems and in making decisions.

Learning to do refers to the capacity development of young people in the skills required by the world of work whatever their chosen occupation. These skills include communication skills, teamwork and collaborative skills and problem solving skills as well as their capacity to be resilient in the face of adversity.

Learning to be focuses on providing opportunities to foster young people's aesthetic, artistic, scientific, cultural and social discovery and experimentation, and to stimulate their imagination and creativity.

The four pillars proposed by the United Nations complement the 21st century skills as identified in a major international project that involved a group of 250 researchers across 60 institutions worldwide (Griffin, McGaw & Care, 2012). The ten important skills for learners that evolved from an analysis of international educational curriculum and assessment frameworks fall into the following four broad categories.

Ways of thinking (learning to know)
- Creativity and innovation,
- Critical thinking, problem-solving, decision-making
- Learning to learn, metacognition

Ways of working (learning to do)
- Communication

- Collaboration (teamwork)

Tools for working
- Information and communications technology (ICT)
- Information literacy (includes research on sources, evidence, biases, etc.)

Skills for living in the world (learning to live together)
- Citizenship- local and global,
- Life and career
- Personal and social responsibility- including cultural awareness and competence

These ten skills are life skills, not just skills learned at school. The key difference between the pillars proposed by the United Nations and the more recent skills identified by the international team led by Griffin (2012)for the 21st century is that children's use ofinformation and communications technology has increased significantly in the last five years in Western countries and even in developing countries with widespread mobile phone networks throughout Asia. The use of information and communications technology highlights that learning in the 21st century can occur at any time and any place, not just in schools. Eveninfants and toddlers are learning through the use of iPads and mobile phones and education for the 21st century must also teach the ICT and information literacy *tools for working*.

It is also recommended that the *skills for living in the world* be extended to focus on the roots of deep abiding happiness that comes from living life in full harmony with the natural world, with our communities and fellow beings, and with our culture and spiritual heritage (New Development Paradigm).

What can schools or school systems do to embed these 21st century skills and understandings into educational practices for sustainable wellbeing?

Although education is a broader concept than schooling, our children's education depends on the quality of our schools and their teachers. Schools are the most important social institution forhelping children to learn the skills, knowledge and understandings that are critical for sustainable wellbeing in the 21st century.

School systems, governments and policy makers are increasingly focusing on the role of coordinated educational initiatives in promoting mental health and wellbeing in young people. A meta-analysis undertaken by the Collaborative for Academic and Social and Emotional (Durlak et al. 2011)) of 213 research studies into the effectiveness of school-based social and emotional programs identified

that there were significant improvements in students' social-emotional skills and their sense of feeling more connected to their school (Durlak et al.,2011) as a result of participating in Social and Emotional Learning (SEL) programs. The participating schools also documented a 44% decrease in suspensions and a 27% decrease in other disciplinary actions. Academic achievement scores improved by 11 to 17 percentiles that illustrates the strong interdependence of student wellbeing with student learning. The school-based programs were also most effective at increasing academic achievement when taught by the classroom teacher, rather than a visiting specialist. A classroom teacher can embed the program into their classroom and school practices, and integrate the social-emotional learning with the academic curriculum. The teacher can also customise the program for individual student's needs or the class as a whole.

Diekstra (2008) also conducted a meta-analysis of worldwide research studies into the effectiveness of school-based social and emotional learning programs. The study concluded that enhanced social & emotional development is the key to the overall development of students in terms of their personality, academic progress, school career and societal functioning.Universal school-based social and emotional learning programs were seen as highly beneficial for children and adolescents, especially those implemented with students aged between 5 and 13 (ie in primary/elementary schools). Young people from low socio-economic status and different ethnic backgrounds were found to benefit at least as much as other young people (and often more) from social and emotional programs.

School-based pathways for sustained student wellbeing

The following section explores evidence-based 'wellbeing pathways' that describe the directions schools can take to enhance sustained student wellbeing and their engagement in learning. These pathways are

1. *Building a supportive, respectful and connected school community* based on values education and the intentional development of positive relationships
2. *Developing Social-Emotional Learning Skills, Thinking Skills& ICT Skills*
3. *Using strengths-based approaches*
4. *Fostering a sense of meaning and purpose* through community engagement and student ownership

All four pathways are derived from the research literature that strongly links student wellbeing with student engagement in learningand learning outcomes (Noble et al., 2008).

Sustainable student wellbeing is seen as an outcome of these pathways. All the wellbeing pathways are inevitably interrelated and interdependent but also discrete enough to be separable. The more pathways that a student is able to access at school, the better their education and the higher their level of wellbeing. All four pathways together contribute to developing a holistic, dynamic and connected school community that ensures a more sustainable and equitable education for all children that is central to promoting happiness and wellbeing for all (students, teachers, parents and the local community).

Pathway 1: Building a supportive, respectful and connected school community based on values education and the intentional development of positive relationships

> Interdependence is not a theory, but a practical reality that impacts our everyday lives (New Development Paradigm).

This section first addresses how values can be embedded in school practices and curriculum and then reviews the importance of positive relationships for sustained student wellbeing and positive schools.

Values Education

Sustained happiness and wellbeing is underpinned by positive values that strengthen communities. Values are intrinsic to all that a school does. A starting point in building a supportive, respectful and connected school culture is to help a school community clarify and reach agreement about the values that guide the school's practices. If a school articulates pro-social values through it's vision statement, policies, structures and teaching practices, then these values form a 'moral map' that guides how everyone in the school community interacts and communicates with each other and the positive choices they make. The importance of learning to act in accord with one's pro-social values for sustained wellbeing in one's youth is illustrated by a longitudinal study that tracked high school students over fifty years into late adulthood. The students were interviewed every ten years and the results demonstrated that 'giving' adolescents became both psychologically and physically healthier adults (Wink et al. 2007).

The critical importance of a whole school approach to values education was endorsed by the Australian Government's Values Education Project that involved 166 schools in 26 school clusters and 70,000 students. Acting in accord with positive values ensures that everyone in the school community understands that their happiness and wellbeing derives from contributing to the happiness of others. The project's final report observed that *'involving more*

people in the enterprise takes more time but ensures deeper commitment, stronger consistency and durable continuity beyond personnel changes.'

What are the values that resonant across cultures and are universally acceptable to both individualistic Western cultures as well as collectivist cultures of Africa, Asia and the Middle East? According to the former President of UNESCO, Lourdes Quisumblingvalues are an integral component of education and are essential if an individual is to 'survive, to live and work in dignity and to continue learning'. Arguably values are essential to help individuals and communities to flourish. The values Quisumbling identifies for personal and social transformation are peace, human rights, dignity, democracy, tolerance, justice, cooperation and sustainable development.

From surveys of more than 25,000 people in 44 countries, Schwartz and his colleagues (2011) identified ten types of universal values. These values fall on two dimensions: *self-transcendence* that is more concerned with collective interests and *self-enhancement* that is more concerned with individual interests.

- *Self-enhancement* (individualism) is represented by nine values in Schwartz' research: social power, wealth, social recognition, authority, self respect, ambition, influence, capability and success.

- *Self-transcendence* (collectivism) is represented by fifteen values: equality, a world at peace, unity with nature, wisdom, a world of beauty, social justice, broadmindedness, a protected environment, mature love, true friendship, loyalty, honesty, helpfulness, responsibility and forgiveness. Of interest to education for sustained student wellbeing, people who give priority to self-transcendent values are more willing to engage in altruistic, cooperative and/or ecologically responsible behaviour than people who give priority to individual or self-enhancement values.

Teaching values

How can self-transcendent values that accord with sustainable wellbeing be readily communicated to schools and especially to children and young people so these values effectively guide their behaviour? The Australian Values Education Good Practice Schools Projects found that effective values education meant that a school's shared values must be explicitly articulated, explicitly taught, modelled by staff and embedded in the mainstream life of the school. This means values education is integrated in the mainstream curriculum rather than as an 'add-on' or separate to the academic curriculum and that teachers consciously create many opportunities for students to practise the values.

One example is the articulation of the following core values which have been taught to children as young as four and five years of age through to teenagers using children's literature, media stories, role-plays, writing activities and opportunities for students to engage in classroom and school community activities that provide service to others (McGrath & Noble, 2011).

- *Compassion:* Caring about the wellbeing of others and helping where you can;
- *Cooperation:* Working together to achieve a shared goal. Cooperating includes cooperating for world peace and for the protection of our environment.
- *Acceptance of differences:* Recognising the right of others to be different and not excluding or mistreating them because they are different; acting on the inclusive belief that diversity is to be celebrated and others are fundamentally good;
- *Respect for others:* Acting towards others in ways that respect their rights;for example to have dignity, have their feelings considered, be safe and be treated fairly;
- *Friendliness:* Acting towards others in an inclusive and kind way;
- *Honesty:* Telling the truth,and owning up to anything you have done;
- *Fairness:* Focusing on equity and addressing injustices; and
- *Responsibility:* Acting in ways that honour promises and commitments and looking after the wellbeing of those less able.

Values education initiatives in schools have been shown to extend the strategies, options and repertoires of teachers in effectively managing learning environments and in developing supportive and connected school and class cultures that positively connect learners with their classmates and teachers (Lovat & Clement 2008; Carr, 2006). A focus on values increases children's sense of safety from bullying and harassment (Battistich *et al.*, 2001; Cowie & Olafsson, 2000; Cross *et al.*, 2004a; Flannery *et al.*, 2003; Frey *et al.*, 2000. From their experience in working with schools implementing the Australian Framework in Values Education, Lovat and Toomey (2007) conclude that values education is at the heart of quality teaching. Many of the school projects funded by this Values initiative engaged students in purposeful authentic learning activities that were valued by the students, had broad community value and met or exceeded mandated curriculum goals (Holdsworth, 2002).

A Case Study
Values in action across the school
When I met Gerda v d Westhuizen she was the principal of the Observatory School for Girls, a school in a very impoverished area of Johannesburg where many families were refugees from other African countries, where often four families shared one room, and where there was no hope of work for most of these families who were just surviving. Gerda's explicit focus on values formed the core business of the whole school community. She chose one of the twelve values from the *Living Values* program every two weeks to become the central focus for everyone's work and behaviour across the school. The twelve Living Values are freedom, cooperation, tolerance, happiness, honesty, love, peace, humility, respect, responsibility, simplicity, and unity. Gerda drew the children's attention to the current value by making a visually stimulating and eye-catching display of the value and especially the actions the students could take to put that value into action. This display was on a notice board in a prominent place in the school playground. The most highly prized award in the school was the opportunity that a student at each grade level had to wear the values gold sash award for a week that showed that this student had been observed putting this value into action through their interactions with others across the school.

Positive Relationships

We are all deeply social beings. A child's sense of belonging and the support provided by close personal relationships with peers and teachers is vital to their wellbeing.Isolation or exclusion exacts a very high emotional price. Children's wellbeing at school comes from being connected to their peers and teachers and their collaborative engagement in learning.

Positive peer relationships

A student's level of social competence and their friendship networks are predictive of their academic achievement (Caprara et al., 2000; Wentzel & Caldwell, 1997). A significant meta-analysis of 148 studies involving 17,000 students conducted in 11 different countries found positive peer relationships explained 33-40% of variation in academic achievement (Roseth, Johnson & Johnson 2008). Feeling accepted by peers and having positive peer interactions can enhance the confidence of vulnerable students and make it more likely that they will behave in ways that further encourage positive relationships with others. Criss et al. (2002) have demonstrated that peer acceptance and peer friendships can moderate aggressive and acting-out behaviour in young children with family backgrounds characterised by family adversity such as economic/ecological disadvantage, violent marital conflict and harsh family discipline. Research suggests that having high-quality friendships, or at least

one best friend, can help prevent children and young people from being bullied (Bollmer et al., 2005; Fox 2006).

The number of friendships that a child has is not as important as the quality of those friendships. Werner and Smith (1982) identified that resilient young people, although not necessarily popular, tended to develop a small number of friendships with people who stuck with them, sometimes from primary school through to middle age. High quality friendships are characterised by this kind of loyalty and support as well as a willingness to stand up for their friend (Bollmer et al., 2005). Poor quality friendships feature negative characteristicssuch as conflict or betrayal & have been linked with emotional difficulties (Greco & Morris 2005). In some cases bullying can occur within low-quality friendships (Mishima 2003; Mishna et al., 2008). It is helpful to teach children and young people skills for making and keeping friends but also skills for monitoring the quality of one's friendships.

Friendships at school can provide a buffer for studentsif they are bullied or having difficulties. Adolescent girls in particular are more likely to seek peer support than family support when they are experiencing difficulties (Fischmann & Cotterell, 2000). Friendships provide students with intimacy, a sense of belonging, security, validation and affirmation and social and practical support. They also offer opportunities for learners to practise and refine their social skills and discuss moral dilemmas. This assists in the development of their of empathy and socio-moral reasoning (Hodges Boivin Bukowski & Vitaro, 1999; Schonert-Reichel, 1999; Thoma & Ladewig 1991).

Positive Teacher-student Relationships
Positive teacher-student relationships play an important role in students' resilience and wellbeing (Brazelton & Greenspan, 2000; Geary, 1988; Nadel & Muir, 2005; Raskauskas et al., 2010; Weare, 2000). The quality of the teacher–student relationship has also been shown to be one of the most significant factors influencing student learning outcomes (Cornelius-White, 2007; Hattie, 2009; Rowe, 2001). Many studies have found that children with close positive teacher–student relationships achieve more highly, have more positive attitudes toward school, are more engaged in the learning that occurs in the classroom and are less likely to repeat a grade (e.g. Birch and Ladd 1997; Hamre and Pianta, 2001).

Many researchers and educators have argued that teachers' relationships with their students cannot just be left to chance and that it is a teacher's professional responsibility to ensure that they establish a positive relationship with each student (Krause et al. 2006; Marzano et al., 2003; Smeyers, 1999). Both teachers and students believe that fostering positive relationships with students is a core

aspect of what effective teachers do (Hattie, 2009; Good & Brophy, 2000; Larrivee, 2005). When evaluating whether or not their teacher is a 'good' teacher', students tend to focus most on the interpersonal quality of their relationship with them (Rowe 2004; Slade & Trent, 2000; Werner 2000; Dornbusch, 1999).

Meta-analytical research undertaken by Marzano (2003) strongly suggests that positive teacher-student relationships are also the foundation of effective classroom management. In his meta-analysis of research studies Marzano (2003) found that, on average, teachers who had high-quality relationships with their students had 31 percent fewer discipline and related problems in a given year than did teachers who did not have this type of relationship with their students.

High quality teacher-student relationships are characterised by involvement, emotional safety, understanding, warmth, closeness, trust, respect, care and support (Brazelton & Greenspan, 2000; Good & Brophy, 2000; Krause et al. 2006; Larrivee 2005; Noddings, 2005). Teachers who have positive relationships with their students are more likely to behave towards them in the following ways:

- They acknowledge them, greet them by name and with a smile & notice when they are absent (Benard 1997; Stipek 2006).
- They respond to misbehaviour with explanations rather than with punishment or coercion (Bergin & Bergin 2009; Noddings 1992; Stipek 2006)
- They take a personal interest in them as individuals and get to know them (Marzano 2003; Stipek 2006); they also endeavour to know and understand them as individuals with a life outside school (Trent, 2001)
- They are available and approachable (Pianta 1999; Weissberg Caplan & Harwood, 1991)
- They are fair and respectful. (Stipek, 2006). Keddie and Churchill (2003) found that, when asked what they liked about the good relationships they had with certain teachers, adolescent boys most frequently referred to the fair and respectful way in which their teachers treated them.
- They have fun with their students and let students get to know them through some degree of self-disclosure and being 'real' with them (Davis 1993). In this way common interests and experiences can be identified.
- They support their students in the development of autonomy e.g. by offering choice and opportunities for students to be involved in decision-making (Gurland and Grolnick 2003).
- They listen to them when they have concernsor worries and offer emotional support (Benard, 1997).

High quality teacher-student relationships lead to feelings of security that empower children to interact confidently with their environment and encourage them to adopt the behaviour and values modelled by their teacher (Bergin & Bergin 2009). Children's behaviour will be influenced by the behaviour of people around them that they trust or who function as a secure base within a relationship (Masten and Obradović 2008). Feelings of security also promote child self-reliance and independence (Bretherton and Munholland, 1999).

Students who believe that their teachers care about them are more motivated to try hard, pay attention in class and do well and are therefore more likely to achieve and stay in school rather than drop out (Benard 2004; Pianta 1999; Sztejnberg et al. 2004; Wentzel 1997).   Students who experience good relationships with their teachers are more likely to be open and responsive to their directives and advice (Gregory et al. 2010) and more reluctant to disappoint them by failing to complete assignments, being absent from school or engaging in anti-social behaviour (Stipek, 2006) The way in which a teacher responds to a vulnerable student can also 'set the tone' for how peers respond to that student (Hughes Cavell & Wilson, 2001). This increases the likelihood that a student will be accepted by his/her classmates.

A Case Study
Buddy programs for whole school positive relationships
The implementation of buddy programs that involve all students and all staff including administration and support staff illustrate one school's focus on the importance of building positive relationships across the whole school community. Like many schools, St Charles Borromeo Primary School in Melbourne for many years has successfully run a buddy program where the year 5 and year 6 children (10-12 year olds) become a buddy for a child (5/6 year old) in their first year of school. The buddies connect with each other during informal times in the playground as well as during formal lesson times where the Year six children act as tutors. But St Charles takes the concept of a buddy program further. The years 1/2 children buddy up with the years 3/4 children. Also the school teams up the year 5 children with 'an oldie' at a nearby residential home for elderly people. Once a term (4 times per year) the children and the elderly take turns at hosting a meeting at the residential home or the school and learning from each other. For example the children might teach their elderly buddy about technology such as sending emails etc and the 'oldies' might teach a card game or about their life when they were young. Another variation of the buddy program is that each year 6 child has an adult staff mentor as a buddy who meets their year 6 buddy regularly to prepare them for secondary schooling and early adolescence. Also all new parents/carers are buddied up with existing parents/carers to facilitate their entry into the school community. In all examples of the school's buddy programs the focus is on

---

reciprocity where both 'buddies' benefit from the positive relationship, gain in-school-community support and value diversity in age, gender, and cultural backgrounds (Cahill, 2012).

Pathway 2: Developing Social-Emotional Competencies and Thinking Skills

A learner's engagement in their schooling and educationcan be viewed from four perspectives: social engagement, behavioural engagement, emotional engagement and cognitive engagement. When learners are *socially engaged* they are effectively communicating with their classmates and teacher, working well in a team and cooperating well with others by using social skills such as turn taking, active listening, and negotiating. When students are *emotionally engaged* in learning in a positive way they are interested, curious, excited, confident, joyful and they are proud of their learning products.When students are *behaviourally engaged* they are positive, respectful participants who are actively involved in the learning process whether it be an individual, group or class activity. These social-emotional skills encapsulate the '*Ways of working/learning to do'* skills seen as essential for sustained wellbeing in 21st century. These social-emotional skills also underpin the development of positive relationships in the short term and for life-long learning and life and represent the*Skills for living in the world* (learning to live together).

When students are *cognitively engaged* they are intellectually challenged and stretched by their learning activity.They show a capacity to be self-regulated, and they are prepared to persevere even when the task is difficult. They are also more likely to employ critical and creative thinking as they analyse possible solutions and build on each other's ideas to solve the problem or task at hand. These thinking skills incorporate the *Ways of thinking* (learning to know). Cognitively challenging students is important for all students but appears to be particularly important for students who traditionally may be perceived as 'poor learners'. When teachers collectively raised their expectations of all their students, made their students clearly aware of these high expectations, and provided challenging learning experiences, they consistently observed improvements in their students' learning, and in their self confidence and behaviour (Groundwater-Smith & Kemmis, 2004).

The use of information communication technology (*tools for working)* can create a highly motivating learning environment for students bythe provision of learning activities that engage through online communication, social networking and the use of gaming principles. ICT provides opportunities for 'anytime, any place' learning that increases access to quality learning environments for all learners. Learners' use of ICT also increases their capacity to take responsibility for their own learning and to be creative and innovative in the way they learn, in their problem solving and decision-making and in the

multi-media products they produce. The benefits are especially strongfor learners in remote communities who have access to ICT but not access to high quality schooling (e.g. Australian indigenous learners).

Increasingly educators are recognising the importance of explicitly teaching these social emotional skills, thinking skills and ICT skills and embedding their students' practice of the skills through highly engaging learning activities that help students gain a genuine sense of contributing to others as local and global citizens.

Social-emotional competencies

The social and emotional skills and attitudes related to student wellbeing include social skills, resilience skills (including helpful thinking skills and optimistic thinking skills), skills for managing uncomfortable emotions and skills for amplifying positive emotions. All these skills are critical to developing sustained student wellbeing where students feel connected and responsible for their own and each other's wellbeing.

- *Social skills:* Key social skills in school settings include: sharing resources and workload, cooperating, respectfully disagreeing, negotiating, making and keeping friends, having an interesting conversation, presenting to an audience, and managing conflict well. Social skills have been described as 'academic enablers'. A student's level of social competence and their friendship networks have been found to be predictive of their academic achievement (Caprara et al. 2000; Wentzel & Caldwell 1997). Friendships provide students with intimacy, a sense of belonging, security, validation and affirmation and social and academic support. Friendships also offer students opportunities to practise and refine their social skills and discuss moral dilemmas in a way that enhances the development of empathy and socio-moral reasoning (Hodges Boivin Bukowski & Vitaro, 1999; Schonert-Reichel 1999; Thoma & Ladewig, 1991). Having the social competencies to develop high-quality friendships, or at least one best friend, can also help prevent children and young people from being bullied (Bollmer et al. 2005; Fox 2006).

- *Resilience skills:* Some of the core skills that enable a young person to cope with difficult times and challenges are: optimistic thinking skills, helpful thinking skills, adaptive distancing skills, using humour and seeking assistance when needed.
  1. <u>Optimistic thinking</u>: In their review of the construct of optimism, MacLeod & Moore (2000) conclude that an optimistic way of interpreting and adjusting to negative life events is an essential component of coping. The following four components to optimism

are a useful focus for school-based resilience and wellbeing programs:

Positivity: finding the positives in negative situations, however small

Mastery: feeling some sense of control and competence in school work and in other aspects of one's life.

Hope: having a disposition or tendency to *expect* things to work out, to be forward looking and proactive and to have the confidence to persist when faced with setbacks or adversity; (Carver & Scheier, 1999; Masten, 1994); and believing that failures and setbacks will happen but that things will get better and you can try again (Benard, 1997).

An optimistic explanatory style: believing that bad situations are temporary, acknowledging that bad situations are usually not all your fault, and believing that bad situations are specific, and don't affect everything else or necessarily flow over into all aspects of your life (Seligman 1998; Gillham & Reivich 2004; Seligman et al.1995)

<u>Helpful thinking</u> is always rational (ie reflects how things really are rather than how they should be or how an individual would like them to be) and helps an individual to calm down, feel more emotionally in control and hence be more able to solve problems (Werner and Smith, 1992; Ellis, 1997). It derives from the original Cognitive Behaviour Therapy model (CBT) (Beck, 1979) based on the understanding that how you think affects how you feel which in turn influences how you behave.

<u>Adaptive distancing</u> encompasses a range of skills such as: being able to detach from individuals whose influence is negative; withdrawing from family members who are enmeshed in anti-social or dysfunctional behaviour (Werner & Smith 1992); emotionally distancing oneself from distressing and unalterable situations instead of constantly immersing oneself in a negative situation and continually thinking about it.

<u>Humour</u>. Individuals are less likely to succumb to feelings of depression and helplessness if they are able to find something humorous, even if only small, in an adverse situation (Benard 2004; Wolin & Wolin 1993). Lefcourt (2001) has argued that humour enables individuals to live in what are often unbearable circumstances. Humour can also be seen as a form of optimism that helps to keep things in perspective.

- *Self management and self-discipline.* These skills include: a willingness to plan and set both personal and academic goals and be prepared to strive, persist and work hard towards achieving those goals(Vaillant 2005; Werner & Smith 1992; Dweck 2005); a preparedness to tolerate frustration and delay short-term gratification in order to achieve longer term outcomes (Masten & Obradović 2008; Vaillant 2005; Werner & Smith 1992); time management and organisational and planning skills. Baumeister et al., (2007) highlight the importance of self control and willpower as critical to school and life success and Hattie (2009) highlights the importance of self-regulation for school success.

- Emotional literacy
  1. <u>Skills for managing uncomfortable emotions:</u>Skills for handling one's emotions are important components of resilience and wellbeing (Masten 2004; Masten and Coatsworth, 1998).These skills include: calming oneself down and managing uncomfortable feelings such as anger, fear and disappointment.
  2. <u>Skills for amplifying positive emotions.</u> Positive emotions at school can include feelings of belonging, feeling safe, feeling satisfied with their learning, pride, curiosity, excitement and enjoyment.The broaden-and-build theory of positive emotions (Fredrickson & Tugade 2004; Fredrickson & Joiner 2002) proposes that the ongoing experience of these positive emotions helps to extend one's awareness of options for problem solving and coping. For example experiencing feelings of closeness and satisfaction when working with others to accomplish a shared goal can become valuable knowledge about how to get along with others and access support from others in difficult times. Having fun through playing games, singing and dancing together at school can contribute to creative thinking, physical fitness and better health. The joy and fun that occurs during social play can build bonds, highlight the importance of humour and teach and encourage empathy and perspective taking.

     These positive emotional 'assets' can be drawn on if needed and can help young people to deal with distressing events that are temporarily occurring in their life and 'bounce back' rather than break. Learning how to amplify positive emotions also 'undoes' the effects of stress more quickly (Fredrickson & Tugade 2004). In contrast, experiencing predominantly negative emotions such as anxiety, anger and disappointment are more likely to prompt narrow attention on survival-oriented behaviours such as avoidance, running away or fighting.

Thinking skills

Higher order thinking skills empower students to think flexibly and creatively, to make reasoned decisions and to critically analyse and evaluate possible strategies to solve complex problems. These skills are life skills and essential not only for academic success but also for sustainedhappiness and wellbeing (McGrath & Noble 2010). Teachers can scaffold higher order thinking using graphic organizers to facilitate an organized approach to student thinking and problem solving. John Hattie's meta-analysis of student learning involved more than 800 analyses of student learning in over 52,600 studies. Good teaching, according to Hattie (2009 p.159) "is less about the content of the curricula and more about the strategies teachers use to implement the curriculum so that students progress upwards through curricula content."

Pedagogy that builds positive relationships and promotes academic effort

Cooperative learning is a significant success story with one of the largest bodies of knowledge in educational and social psychology. The numerous research outcomes can be organized under three categories: improving student effort to achieve; building positive relationships and support and enhancing student wellbeing.The most effective strategies combine a scaffold for higher order thinking, and are organized as cooperative learning activities so the strategy encourages the use of thinking skills as well as social-emotional skills. Both the structure of the scaffold and the nature of the topic are key factors in promoting deep engagement in learning.The best topics are values-based controversial or provocative events, issues or 'big ideas', or issues that arise from texts or the media that capture the students' interest (McGrath & Noble, 2010) and further their sense of responsibility to their community and the natural world.

Teaching strategies for thinking skills and social-emotional learning
The following strategies all combine higher order thinking skills, social-emotional skills and employ cooperative learning (McGrath & Noble, 2010). The topics the children research and discuss could readily be issues that contribute to their understanding of ecological sustainability and a just and peaceful local and global community.

- Ten Thinking Tracks is a sequenced cooperative problem-solving/decision making scaffold where students work in groups. Each student in the group takes turns in leading the discussion and recording their group's answers in relation to two or three tracks. The tracks challenge children to think of the bright side, the down side, their feelings, suggest improvements, think ethically and to consider issues of social justice and finally to negotiate a group solution eg patenting of seeds so farmers have to buy their seeds.

- Multi-View encourages perspective taking and empathy. Students consider a problem such as cyber-bullying, organ donation or the case of the Kerala women against Coca Cola plant from different people's perspectives.
- Under the Microscopeencouragesstudents to explore a controversial issue through different lens that includes their responsibility and the impact of the issue or event on their own lives and on others' lives.
- Cooperative Controversy provides a scaffold for conflict resolution. Students work in groups of 4where pair A identifies two arguments in support of a topic-related controversial proposition and pair B identifies two arguments against it. Each pair presents their arguments to the other pair. Then each pair'sperspective is reversed and pair A thinks of new disadvantages and pair B advantages. Finally the group of 4 negotiate the strongest argument for and against.
- In Socratic circles half the class becomes the inner circle as discussants and the other half work in the outer circle as observers. The observers have a checklist to provide constructive feedback to the discussants on the quality of their thinking and their use of social-emotional skills. The two groups then swap roles and responsibilities.

Pathway 3: Using strengths-based approaches

Schools that value the different individual and collective strengths of all members of the school community demonstrate the third pathway for sustained student wellbeing. A 'strength' can be defined as a natural capacity for behaving, thinking and feeling in a way that promotes successful goal achievement (Linley & Harrington, 2006). Using one's strengths in schoolwork or in one's job is far more enjoyable and productive than working on one's weaknesses, especially for those students whose strengths are not in the traditional academic domain (Noble, 2004). This strengths-based approach does not ignore weaknesses but rather helps students achieve optimal development by building on their strengths and understanding and managing their weaknesses.When people work with their strengths they tend to learn more readily, perform at a higher level, are more motivated and confident, and have a stronger sense of satisfaction, mastery and competence (Clifton &Harter, 2006; Peterson & Seligman, 2004; Linley & Harrington, 2006).

A 'strength' can be a specific ability (eg playing music, swimming, cartooning, using spread-sheets) or a character trait (eg persistence, bravery, kindness to others, leadership skills). Gardner's (1999) theory of multiple intelligences for ability strengths and Peterson and Seligman's (2004) model for character strengths are both useful frameworks for educators to utilise in school settings and have been applied in class and school settings (eg see Kornhaber et al.,2005; McGrath & Noble 2005; McGrath & Noble, 2011; Chen et al.,2009; Petersen & Seligman, 2004; Yeager et al., 2011).

The first step for teachers is to help students to select strategies for the identification of their strengths so they develop a deep understanding of their relative strengths and weaknesses. The second step is to collaboratively design and implement educational programs and environments in which students can use and further develop their strengths in a productive and satisfying way, and learn that work that they find difficult may require a lot more effort.

Howard Gardner's (1999) model of multiple intelligences (MI) provides directions for identification and development of cognitive strengths. MI theory has been widely adopted in schools since its publication over twenty-five years ago and identifies eight intelligences. A differentiated curriculum based on Gardner's multiple intelligences model has the potential to build positive educational communities in which students value and celebrate student differences and for students who struggle with learning to achieve more academic success (Kornhaber, et al., 2003; McGrath & Noble, 2005a,2005b; Noble 2004). An evaluation of outcomes in forty-one schools that had been using MI theory for curriculum differentiation for at least three years found significant benefits of the MI approach in terms of improvements in student engagement and learning, student behaviour, and parent participation (Kornhaber, et al., 2003). This evaluation found particular benefits for students with learning difficulties who demonstrated greater effort in learning, more motivation and improved learning outcomes.

The MI/Bloom Matrix (McGrath & Noble, 2005a, 2005b) is a curriculum planning tool which assists teachers to develop tasks based on each of the eight intelligences at each of the Revised Bloom's levels of thinking. The planner helps teachers to provide opportunities for students to make meaningful choices about their learning tasks and products (Noble, 2004). The MI/Bloom Matrix is accompanied by a number of MI assessment and tools that can be used to assist students to identify their own relative cognitive strengths. The use of the matrix helped teachers in two schools identify academic and other strengths in their students and increased the teachers' confidence and skills in diversifying their curriculum tasks to effectively engage different students in learning (Noble, 2004).

Teachers can also help students to identify their character strengths. A useful tool for this purpose is Peterson and Seligman's online VIA (Values in Action) Signature Strengths Questionnaire (www.viastrengths.org). The children's version of the questionnaire is for children from 10 years to 17 years of age. For younger children, Park and Peterson (2006) successfully asked parents of children who were too young to complete the questionnaire to identify their children's strengths. An example of the use of the framework with students is illustrated in secondary students application of their knowledge of character

strengths to analyse characters in English literature, leading to significantly improvement in their essay writing skills (White, 2012).

Engagement or psychological flow is a term coined by Csikzentmihalyi (2003). He has identified that young people are more likely to be fully engaged and experience 'flow' when involved in an activity that utilises their strength(s) and has a degree of challenge that requires a reasonably high level of skill and attention in a specific domain (eg building a model, or playing a musical instrument) (Csikszentmihalyi, et al., 1993). Being in a state of 'flow' also increases young people's satisfaction (from the completion of a task or the creation of a product or performance) and enables them to have some respite from worries and problems they may be experiencing. Tasks that engage student strengths in the service of others also contribute to their sense of meaning and purpose.

Pathway 4: Meaning and purpose

A meaningful life has been defined as "one that joins with something larger than we are – and the larger that something is, the more meaning our lives have" (Seligman, 2002 p.260). Seligman states that life is given meaning when we use our strengths every day in the main realms of living 'to forward knowledge, power or goodness'.

Students have a sense of 'meaning' in their liveswhen they are engaging their strengths and using them to do something that has impact on others beyond themselves. They have a sense of 'purpose' when they pursue worthwhile goals. Most current curriculum initiatives focus on the importance of an authentic curriculum that hasrelevance, meaning or 'connectedness' to students' lives.Student voice and agency is a feature of high performing schools where student wellbeing is a priority. One example of empowering students by giving them a 'voice' is through their participation in Student Action Teams (Holdworth, 2000). A student action team is a group of students who identify and tackle a school or community issue: they research the issue, make plans and proposals about it, and take action on it (see case study below). To ensure the success of these student-led initiatives it is important they arerecognized within the 'authorised activities' of a school, and within the 'authorised approaches' of the Education system (Holdsworth, 2000). The importance of student ownership for effective projects that 'made a difference' was also a strong theme that emerged in an Australian Government Project involving 171 schools planning and implementing 'safe schools' projects (McGrath, 2007).

Other school initiatives that can foster a sense of meaning and purpose include: encouraging students to participate in peer support programs (eg peer mediation, buddy systems, mentoring systems); finding ways for students to

participate in class-wide or school-wide leadership and decision-making structures (eg circle time, classroom councils, classroom committees or school-wide Student Representative Committees); arranging for student products and performances to reach a wider audience (eg posters or artwork displayed in the local community such as a shopping centre, performances recorded on DVDs that can be bought or borrowed by parents, student-made books placed in the library etc); and developing students' sense of pride in and commitment to their school (eg by establishing student 'School Pride Committees' at each year level).

A case study of students taking action for meaning and purpose

An academic inquiry unit on 'caring for our environment' inspired children at one primary school to take action to make a difference in their school and local environment. The children set up their student action team titled the environmental impact team made up of students from prep (the first year of school) to year 6. The team have initiated a number of environmental projects that include i) a schoolwide 'nude food' campaign where all children are encouraged to bring their lunch to school without plastic wrap; ii) the installation of 3 rubbish bins in every classroom for a) recycling, b) their school worm farm and c)non-recyclable waste and iii) a project to raise funds titled living gardens where the children have made packs of different seeds of herbs and vegetables to sell to the school community. The funds has helped the children set up their own herb and vegetable garden and chickens in the school grounds as well as buy trees to replant in the local community (Cahill, 2012). An example at the secondary level was initiated with a group of year 10 students who were disengaged from school and alienated from their neighbourhoods. Appreciative inquiry questions were used to help the students identify their strengths and create meaningful community projects of their choice designed to show how 'we will make a difference in our community'(Morsilla & Fisher, 2007). The projects included a public underage dance party, and the development of children's activities at a refugee cultural festival. These two examples illustrate the key aspects of a Student Action Team; the students are challenged, their participation enables them to make decisions about what's important to them; they learn how to apply their knowledge, skills and attitudes to 'real world' situations; and they gain a real 'authentic' sense of meaning and purpose by contributing to making a difference within their community.

Education is central to all other domains for sustained wellbeing

Psychological wellbeing: Defining student wellbeing

A logical starting point for the Education domain is to develop a robust and evidence-based definition of student wellbeing in order to effectively guide educational policy and school practices. Naturally a child's family, home and community all significantly impact on a young person's wellbeing. However an

educational perspective focuses on the actions that schools and teachers can take to help our children and young people flourish within a school context.

Although there are many definitions of wellbeing per se, a literature search revealed only three definitions of student wellbeing (Noble et al., 2008). One definition perceived student wellbeing as"a positive emotional state that is the result of a harmony between the sum of specific context factors on the one hand and the personal needs and expectations towards the school on the other hand" (Engels et al., 2004, p.128); another simply defined student wellbeing as "the degree to which a student feels good in the school environment" (De Fraine et al., 2005); and the third definition focused on student well being as "the degree to which a student is functioning effectively in the school community" (Fraillon, 2004). A more comprehensive definition of student wellbeing in the school context that incorporated the multiple dimensions associated with wellbeing was sought.

In order to develop an operational definition of student wellbeing twenty-six key people working in the field of wellbeing and/or student wellbeing from a range of countries including Australia, Denmark, United Kingdom, Italy, New Zealand, Portugal and the USA were invited to give feedback on a proposed definition of student wellbeing using Delphi methodology. There was significant but not total agreement amongst the experts on the final definition (Noble et al., 2008; NSSF, 2011) which is:

> Optimal student wellbeing is a sustainable state characterised by (predominantly) positive mood and attitude, positive relationships with other students and teachers, resilience, self-optimisation, and a high level of satisfaction with their learning experiences at school.

This definition integrates the subjective (or hedonic) construct of wellbeing that encompasses how students evaluate their life at school. It incorporates the affective component (how they feel) and the cognitive component (what they think). The definition also incorporates the eudaimonic paradigm of wellbeing where wellbeing as construed as an ongoing dynamic process rather than a fixed state by incorporating the notion of self-optimisation. A capacity for self-optimisation refers to the capacity of the student to know their own strengths, abilities and skills and demonstrate a willingness to use this self knowledge to maximise their perceived potential in many areas (eg intellectual, social, emotional, physical and spiritual).

The construct of sustainable happiness goes further than the hedonic and eudaimonic constructs of wellbeing and explicitly includes concern for others,

for one's community and culture and for the natural environment. To further the goal of sustainable happiness it is recommended that an educational policy for sustained student wellbeing integrates all three constructs of student wellbeing. Research indicates that a student with an optimal level of wellbeing is more likely to have higher levels of school attendance, demonstrate age-appropriate academic skills, engage in more pro-social behaviour and be less likely to bully others (Noble et al., 2008).

Resilience

The constructs of wellbeing and resilience are closely linked and bi-directional. Most definitions of wellbeing incorporate some reference, either explicit or implied, to the capacity of the individual to be resilient and resilient students are more likely to have optimal levels of wellbeing. The above definition of student wellbeing incorporates the construct of resilience. Nearly all definitions of resilience refer to the capacity of the individual to demonstrate the personal strengths that are needed to cope with difficulties, hardship, challenge or adversity. Resilience has been described as 'the ability to persist, cope adaptively and bounce back after encountering change, challenges, setback, disappointments, difficult situations or adversity and to return to a reasonable level of wellbeing' (McGrath & Noble, 2003). It is also the capacity to respond adaptively to difficult circumstances and still thrive (McGrath & Noble, 2011). The school pathways that promote sustained student wellbeing all contribute to providing the positive, protective and connected class and school environment and the explicit teaching of the values and personal and interpersonal skills that contribute to student resilience.

Health

Good health is an important element for sustained child wellbeing as it can influence all aspects of a child's life, especially their capacity to attend school and actively participate in learning. Childhood and adolescence is a critical time for the development of health behaviours and the health patterns and habits that develop during their school years often continue into adulthood (Dimitrakaki & Tountas, 2006; WHO, 2004). Individuals with higher rates of education report fewer illnesses and have better mental health and wellbeing than those with lower levels of education (Turrell et al., 2006). Schools have a direct and indirect impact on student health and wellbeing. For example schools can directly teach the benefits of good nutrition and exercise and the adverse effects of substance abuse and smoking. Schools also can indirectly affect children's health by providing the safe and supportive environment that is essential for physical, spiritual, cognitive andsocial-emotional health and wellbeing.

Living standards

Academic achievement and the completion of high school leads to greater employability, less reliance on welfare support and a higher likelihood of participation in further education. These outcomes in turn further increase the likelihood of sustained employment, adequate income, higher living standards and self-sufficiency (Department of Premier & Cabinet 2005; Muir et al.2003)

Cultural diversity and resilience

In most countries every child goes to school so the school is a microcosm of the cultural diversity of the local community. Education for intercultural and interracial harmony begins in classrooms where values of respect and acceptance of difference underpin how children from diverse cultures, languages, nationalities and beliefslearn to interact confidently and constructively with each other. This ability is vital to ensuring social cohesion and sustainable wellbeing both nationally and internationally. Activities to build intercultural and interracial harmony can readily be embedded in the curriculum from the first years of school using personal stories, media reports, contextual information, online forums, quizzes, interactive activities and reflection tasks. Resilience is a product of protective environmental factors such as positive peer and teacher relationships and the social-emotional skills that can be directly taught in classrooms and help to connect children and young people to school and to each other.

Good governance

What is prioritised in education at the state, system and school levels is a reflection of what is prioritised by a nation's government. Government priorities drive the decisions for funding for educational projects and reflect the Government's values. So sustainable happiness and wellbeing of our children and youth must become a Government priority for funding for educational pathways to develop student wellbeing. Good school governance and school leadership is also critical for any initiatives to be sustainable over time.

Community vitality

The well-known African adage: It takes a village to raise a child reflects the critical importance of community partnerships for child wellbeing. Schools are the most important community institution in any village, town or city. A school's partnership with the families in their school community and with local community groups and agencies is seen as central to the school's effectiveness in providing an education for sustained student wellbeing.

Ecological diversity

Teaching our children about ecological diversity and how different countries adapt to this diversity is the starting point for helping our children develop a responsibility for caring for our environment. Helping children understand the

importance ofliving life in full harmony with the natural world, and developing their skills and responsibility for our environment can begin from the first days of schooling.

Educational Policy

How canschool wellbeing pathways underpineducational policy for sustainable student wellbeing?

Many educational policies have been developed in reaction to problems. For example the first Australian National Safe Schools Framework (NSSF) launched in 2004 was a response to concerns about school bullying, harassment and violence. A major revision of this Framework in 2011 incorporates the vision that schools are safe, supportive and respectful teaching and learning communities that promote student wellbeing. The Government's Scoping Study on Approaches to Student Wellbeing (Noble et al., 2008) informed the development of the new Framework. This scoping study included a comprehensive literature review of school pathways for student wellbeing; a new definition of student wellbeing in consultation with 26 national and international experts working in the field and feedback from educators and key stakeholders on policy development for student wellbeing.

Unanimous endorsement for the notion of a national framework or policy for student wellbeing was made by leading educators representing key community and Government agencies linked to education as well as by a sample of school practitioners. A national framework in student wellbeing was seen by both parties to have the following advantages.

A national policy on student wellbeing:
- promotes an holistic education of the whole child;
- provides a common, shared national vision, goals and agreed practices to develop sustained student wellbeing across all states and territories;
- encourages a whole school approach that engages all sectors of the school community in initiatives for student wellbeing to enhance student learning; a whole school approach also encourages sustainability of those initiatives
- generates a common language for teachers and the whole school community about the nature of student wellbeing and its enhancement in classrooms; this common language facilitates the opportunity for meaningful dialogue about student wellbeing within a school, across schools and across states
- enhances the capacity to 'join the dots' and link other national initiatives and policies in education. The examples from the Australian education context are the Framework in Values Education, The Safe Schools

Framework, the Mental Health initiatives such as MindMatters (for secondary schools) and KidsMatter (for primary schools) and the National Schools Drug Education Plan.

Such a framework was also perceived to have the potential to change the dominant paradigm in many schools from a 'deficit perspective' to a positive, values and strengths-based pro-social perspective.

Some of the concerns expressed by the State educational representatives were that teachers were 'framework/policy fatigued' and that a new framework must be seen by teachers to add value to their existing classroom endeavours rather than be perceived as an additional task or burden. Therefore they perceived that a new Framework needed to be promoted to teachers as a tool for consolidating and enriching their existing activities for student wellbeing and linked to student learning outcomes.

The school practitioners were also asked to identify the strongest features of eight current educational policies/frameworks that had led to their implementation in their schools. The element considered the most important is that the Framework demonstrated a strong linkage to research evidence followed by the provision of flexibility for the local context and the provision of practical activities for schools to use.

Factors influencing the successful implementation of a national student wellbeing framework

Almost 90% of the educational 'experts' and over 95% of the school practitioners considered the following factors as 'very important' or 'important' to the successful implementation of a student wellbeing framework.

- Strong systemic and school leadership and a strategic plan
- Developing a collaborative whole school student wellbeing strategic plan
- Providing ongoing and wide-reaching professional learning opportunities for teachers
- Planning for parental involvement

85% of the practitioners and almost 70% of the 'experts' also saw the value of online national resources as 'important' or 'very important' to support implementation of the framework. These resources may include case studies of successful implementation in schools, assessment tools and professional reading. The same response from both parties was also found for the need to plan for community participation. Several of the 'experts' also cited the advantages of a student wellbeing framework for a more coordinated and

coherent approach to student wellbeing across different community agencies. This is illustrated in the following quotation:

> A framework such as this could have far reaching effects. If agencies such as Health were to collaborate with Education in creating and promoting this, it would probably stand a better chance of creating a national shift in awareness.

Recommendations for educational policy development for sustained student wellbeing

The following recommendations are based on what has been learned through the development and implementation of the Australian National Framework in Values Education, the National Safe Schools Framework and the investigation into national interest in a Student Wellbeing Framework (Noble et al., 2008).

1. **Establish a platform for an international framework policy for sustained student wellbeing**

- Seek common agreement and understanding of the **key elements** of a Framework for Sustained Student Wellbeing and early endorsement of the Framework and an Implementation Strategy from the highest levels of decision-making in each country's National and State Education systems
- Ensure the framework reflects the **research evidence** that confirms the link between student wellbeing and learning outcomes
- Link the Framework to national and international Goals for Education and Skills for 21st century
- Seek agreement on the **school pathways** that underpin the Framework for sustained student wellbeing, and consider promoting flexibility so schools can adapt the pathways for their local context.

2. **Collaboratively develop the framework with educational communities**

- Recognise and build on the work already undertaken on sustained student wellbeing in educational communities at the local, national and international level
- Develop a national/international monitoring and evaluation plan, including the development of performance measures to monitor the ongoing implementation of the Framework for Sustained Student Wellbeing.
- Develop and disseminate support material and resources to assist schools to implement the Framework

3. Facilitate support for implementation in schools

- **Implementation plan**: Develop a national/international implementation plan to monitor the ongoing implementation including support for school systems so they can provide support to schools. Indicate a suitable timeline for implementation that gives consideration to school planning cycles and funding support.
- **School leadership**. Develop specific activities to engage school leaders in leading whole school wellbeing. Strengthening schools for sustainable student wellbeing will often involve significant school change and reform. Committed and inspiring leadership that models and articulates the school pathways for sustained student wellbeing provides a vision, energy and focus over time to make a difference.
- **Encourage the appointment of a Student Wellbeing Leader in each school** who has the leadership responsibility for the implementation of student wellbeing initiatives including monitoring progress of these initiatives across the whole school community.
- **A holistic whole school approach.** A whole school approach focuses on positive partnerships and assumes that all members of the school community (i.e. teachers, support staff, students and parents) have a significant role/voice in promoting and sustaining a supportive school and connected culture. A whole-school approach also involves all areas of the school: policy and procedures, teaching practices, curriculum, and the organisation and supervision of the physical and social environment of the school
- **Develop a professional learning plan** for all teachers tailored to the school's vision and agreed school pathways for sustained student wellbeing/ The professional learning plan may include:
    - an initial communication strategy to schools and teachers regarding the nature and purpose of the framework and their role in, and responsibilities for its implementation
    - an ongoing professional learning plan to develop individual and collective teacher capacity and pedagogy in enhancing student wellbeing and learning, and
    - guidelines to schools in building a whole school community culture that enhances student learning about wellbeing.
    - advice to schools about how they can engage parents and community based organisations in their approaches to supporting student well being; and
    - assistance to pre-service education of teachers to help them to better understand that student wellbeing is strongly linked to student learning and their responsibilities in this area.

Ideally the Framework for Sustained Student Wellbeing is available in multiple formats (electronic and paper) and readily accessible to schools. It is also well resourced, evidence-informedand includes many practical examples to guide schools in how to apply the Framework to their own school and classroom context. These resources may include whole school case studies, resources and support materials that clearly demonstrate the interdependence of many school initiatives/pathways to ensure sustained student wellbeing.

A Case Study: The Australian Safe Schools Framework (NSSF)

A national school policy that focuses the attention of both Government ministers and school leadership to the crucial role of schools in promoting student wellbeing and resilience is illustrated by the Australian Government's (2011) National Safe Schools Framework; a framework endorsed by all State Ministers of Education and distributed to all schools in the nation. This policy appears to be a world first in guiding all schools' curriculum and practices and highlights the Australian Government's endorsement of the important role of student wellbeing for learning and achievement. A safe and supportive school is described in the following way:

In a safe and supportive school, the risk from all types of harm is minimised, diversity is valued and all members of the school community feel respected and included and can be confident that they will receive support in the face of any threats to their safety or wellbeing.

The Framework identifies the following nine elements to assist schools in fulfilling this vision:

1. Leadership commitment to a safe school
2. Supportive and connected school culture
3. Policies & practices
4. Professional learning
5 Positive behaviour management approaches
6. Engagement, skill development and a safe school curriculum
7. A focus on student wellbeing and student ownership
8. Early intervention and targeted student and family support
9. Partnerships with families, community agencies and the justice system.

Schools are encouraged to conduct an online evaluation of their school's strengths and limitations based on these nine elements. The Framework provides examples of many evidence-based practices and resources for enhancing their school's capabilities for whole school, staff and student wellbeing. An online 'safe schools hub'to support schools and teachers in their implementation of the Framework will be launched in 2013 and will include case studies of schools thatplace a high priority on sustained student wellbeing.

References

Asher, S.R., & Renshaw, P.D. (1981). Children without friends: Social knowledge and social skill training. in S.R. Asher & J.M. Gottman (Eds.), *The Development of Children's Friendships* (pp.273-298). New York: Cambridge University Press.

Asher, S.R., Renshaw, P.D., & Geraci, R.L. (1980). Children's friendships and social competence. *International Journal of Psycholinguistics*, 1O, 27-39.

Battistich, V., Schaps, E., Watson, M., Solomon, D. & Lewis, C. (2001). 'Effects of the child development project on students' drug use and other problem behaviors'. *Journal of Primary Prevention*, 21, 75–99.

Baumeister, R.F., Vohs, K.D. & Tice, D.M. (2007). The Strength Model of Self-Control. Current Directions in Psychological Science. 16 (6): 351-355

Beck, A.T. (1979). Cognitive Therapy and the Emotional Disorders, New York: Penguin.

Benard, B. (2004). Resiliency: What we have learned. San Francisco: WestEd.

Bergin, C. and Bergin, D. (2009). Attachment in the Classroom. *Education Psychology Review*, Vol. 21, No. 2, pp. 141-170.

Bollmer, J. M., Milich, R., Harris, M. J., & Maras, M. (2005). A friend in need: Friendship quality, internalizing/externalizing behavior, and peer victimization. *Journal of Interpersonal Violence*, 20, 701-712.

Caprara, G.V., Barbaranelli, C., Pastorelli, C., Bandura, A. & Zimbardo, P.G. (2000). Prosocial foundations of children's academic achievement. *Psychological Science*, 11 (4). 302-306.

Carver, C.S. and M.E. Scheier, (1999). *Optimism, in Coping. The Psychology of What Works*, C.R. Snyder, (Ed). Oxford University Press: New York. p. 182-204.

Chen, J., Moran, S. & Gardner, H. (2009). (Eds.) *Multiple Intelligences Around the World. San Francisco*, CA: Jossey-Bass.

Clifton, D.O. & Harter, J.K. (2003). Investing in strengths. In A.K. Cameron, B.J. Dutton & C.R. Quinn (Eds.), Positive organizational scholarship (pp 111-121). San Francisco: Berrett-Koehler Publishers, Inc.

Csikszentmihalyi, M (2002), *Flow: The Classic Work on How to Achieve Happiness*, London: Rider.

De Fraine, B., Van Landeghem, G., & Van Damme J. (2005). An analysis of wellbeing in secondary school with multilevel growth curve models and multilevel multivariate models. Quality & Quantity, 39 , 297-316

Delors, J. (1996). Learning. The Treasure Within. Report to UNESCO of the International Commission on Education for the Twenty-first Century. http://unesdoc.unesco.org/images/0010/001095/109590eo.pdf

Department of Premier and Cabinet, (2005). Better outcomes for disengaged young people: Initial scoping, analysis and Policy review. DESCS SA Government

DeVries, R., & Zan, B. (1994). Moral Classrooms, Moral Children: Creating a Constructive Atmosphere in Early Education. New York: Teachers College Press.

Diekstra, R. (2008) Effectiveness of school- based social and emotional education programmes worldwide (Part One and Part Two). In *Social and emotional Education: An International Analysis*. Santander: Fundacion Marcellino Botin.pp 285-312

Durlak, J. A., Weissberg, R. P., Dymnicki, A. B., Taylor, R. D. and Schellinger, K. B. (2011), The Impact of Enhancing Students' Social and Emotional Learning: A Meta-Analysis of School-Based Universal Interventions, *Child Development*, 82,1,405-432

Dweck, C.S., (2006). *Mindset. The New Psychology of Success*. New York: Random House.

Elias, M. J., & Weissberg, R. P. (2000). Wellness in schools: The grandfather of primary prevention tells a story. In D. Cicchetti, J. Rappaport, I. N. Sandler, & R. P. Weissberg (Eds.), *The Promotion Of Wellness In Children And Adolescents* (pp. 243-269). Washington , DC : Child Welfare League of America Press.

Engels, R. C., Finkenauer, C., Meeus, W., & Dekovic, M. (2001). Parental attachment and adolescents' emotional adjustment: The associations with social skills and relational competence. *Journal of Counseling Psychology*, 48(4), 428-439.

Engels, N., Aelterman, A., Van Petegem, K., & Schepens, A. (2004). Factors which influence the well- being of pupils in Flemish secondary schools. *Educational Studies*, 30 (2), 127-143.Engelwood Cliffs, NJ: Prentice-Hall.

Fraillon, J. (2004), Measuring Student Wellbeing in the Context of Australian Schooling: Discussion Paper. Commissioned by the South Australian department of Education and Children's services as an agent of the Ministerial Council on Education, Employment, Training and Youth Affairs. http://www.mceetya.edu.au/verve/_resources/Measuring_Student_Well Being_in_the_Context_of_Australian_Schooling.pdf

Fredrickson, B. and Joiner, T (2002). Positive emotions trigger upward spirals toward emotional wellbeing. *Psychological Science*. 13: 172-175.

Fredrickson, B. and M. Tugade, (2004). Resilient individuals use positive emotions to bounce back from negative emotional experiences. *Journal of Personality and Social Psychology*. 86 (2): 320-333.

Gardner, H, (1999). Intelligence Reframed: Multiple Intelligences for the 21st Century. New York: Basic Books.

Gillham, J. & Reivich, K. (2004). Cultivating optimism in childhood and adolescence. *The ANNALS of the American Academy of Political and Social Science*, 591, 146-163.

Gresham, F. M., Sugai, G., & Horner, R. H. (2001). Interpreting outcomes of social skills training for students with high-incidence disabilities. *Exceptional Children*, 67, 331-344.

Griffin, P., McGaw, B. & Care, E. (2012). (Eds.)Assessment and Teaching of 21st Century Skills. Springer.

Gurland, S., & Grolnick, W. (2003). Children's expectancies and perceptions of adults: Effects on rapport. *Child Development*, 74(4), 1212–1224

Hattie, J., (2009). *Visible Learning: A Synthesis of Over 800 Meta-analyses Relating to Achievement*. London: Routledge.

Hodges, E. V. E., Boivin, M., Vitaro, F., & Bukowski, W. M. (1999). The power of friendship: Protection against an escalating cycle of peer victimization. *Developmental Psychology*, 35, 94-101.

Keddie, A.& Churchill, R. (2004). Power, control and authority: issues at the centre of boys' relationships with their teachers. *Queensland Journal of Teacher Education*. 19(1), pp. 13-27.

Lefcourt, H.M., (2001). *Humor: The Psychology of Living Buoyantly*. New York: Plenum Publishers.

Linley, P.A. & Harrington, S. (2006). Playing to your strengths, *The Psychologist*, 19, 86–89.

Lovat, T., & Toomey, R. (2007). *Values education and quality teaching: The Double Helix effect*. Sydney: David Barlow.

MacLeod A.K., Moore, R. (2000). Positive thinking revisited: Positive cognitions, well- being and mental health. *Clinical Psychology & Psychotherapy*, 7, 1–10.

Marks, H. M. (2000). Student engagement in instructional activity: Patterns in the elementary, middle, and high school years. *American Educational Research Journal*, 37, 153–184.

Marzano, R.J. Marzano, J.S. & Pickering, D. (2003). *Classroom management that works: Research-based strategies for every teacher*. Alexandria, VA: Association for Supervision and Curriculum Development.

Masten, A. S., & Obradović, J. (2008). Disaster preparation and recovery: Lessons from research on resilience in human development. *Ecology and Society*, 13(1), 9

Masten, A. S. (2004). Regulatory processes, risk and resilience in adolescent development. *Annals of the New York Academy of Sciences* 1021, 310-319.

Masten, A. and Coatsworth, J. (1998). The development of competence in favorable and unfavorable environments: Lessons from research on successful children. *American Psychologist*, 53, 205-220.

McGrath, H. & Noble, T. (2003). *BOUNCE BACK! A classroom resiliency program*. (Teacher's Handbook. Teacher's Resource Books, Level 1: K-2; Level 2: Yrs 3-4; Level 3: Yrs 5-8). Sydney: Pearson Education.

_____ (2010). *HITS and HOTS. Teaching + Thinking + Social Skills*. Melbourne: Pearson Education.

_____ (2010). *HITS and HOTS. Teaching + Thinking + Social Skills*. Melbourne: Pearson Education.

_____ (2011). *BOUNCE BACK! A Wellbeing & Resilience Program*. Lower Primary K-2; Middle Primary: Yrs 3-4; Upper Primary/Junior Secondary: Yrs 5-8. Melbourne: Pearson Education.

_____ (2005). *Eight ways at once. Book One: Multiple Intelligences + Bloom's Revised Taxonomy = 200 differentiated classroom strategies*. Sydney: Pearson Education.

Mishima, K. (2003) 'Bullying Amongst Close Friends in Elementary School', *Japanese Journal of Social Psychology*, Vol.19, pp.41–50.

Mishna, F., Weiner, J., and Pepler, D. (2008) 'Some of my best friends: Experiences of bullying within friendships', *School Psychology International*, Vol.29, pp.549- 573.

Muir, K., Maguire, A., Slack-Smith, D. & Murray, M. (2003). *Youth unemployment in Australia: a contextual, governmental and organizational perspective*. Sydney: The Smith Family.

National Safe Schools Framework (2011) http://www.deewr.gov.au/schooling/nationalsafeschools/Pages/overview.aspx

Noble, T. (2004). Integrating the Revised Bloom's Taxonomy with Multiple Intelligences: A planning tool for curriculum differentiation. *Teachers College Record*. 106(1).,193-211.

Noble, T., McGrath, H., Roffey, S. & Rowling, L. (2008). *A Scoping Study on Student Wellbeing*. Australian Government Department of Education, Employment & Workplace Relations.

Noble, T.&McGrath, H. (2008) The positive educational practices framework : a tool for facilitating the work of educational psychologists in promoting pupil wellbeing, *Educational and child psychology*, 25 (2), 119-134

Noddings, N. (2005). *The Challenge to Care in Schools* (2nd ed.). New York, NY: Teachers College Press.

Peterson, C. &Seligman, M.E.P. (2004). *Character strengths and virtues: A handbook and classification*. Oxford: Oxford University Press.

Pianta, R., Stuhlman, M., & Hamre, B. (2002). How schools can do better: Fostering stronger connections between teachers and students. *New Directions for Youth Development*, 93, 91–107.

Rhodes, J. E., Contreras, J. M., & Mangelsdorf, S. C. (1994). Natural mentor relationships among Latina adolescent mothers: Psychological adjustment, moderating processes, and the role of early parental acceptance. *American Journal of Psychology*, 22(2), 211-227.

Rhodes, J. E., Grossman, J. B., & Resch, N. L. (2000). Agents of change: Pathways through which mentoring relationships influence adolescents' academic adjustment. *Child Development*, 71(6), 1662-1671.

Roseth, C.J., Johnson, D.W., & Johnson, R.T. (2008). Promoting early adolescents' achievement and peer relationships: The effects of cooperative, competitive and individualistic goal structures. *Psychological Bulletin*, 134(2), 223-246.

Shiva, V. (2005). *Earth Democracy. Justice, Sustainability & Peace*. NY: South End Press.

Stanley, M. & McGrath, H. (2006). Buddy systems: Peer support in action. In H.McGrath & T.Noble. *Bullying Solutions: Evidence-Based Approaches*. Sydney: Pearson Education

Schaps, E. (2003a). Creating a school community, *Educational Leadership*, 60(6), 31-33.

_____ (2003b). *The Role of Supportive School Environments in Promoting Academic Success*. California Department of Education Press.

Schaps, E. & Lewis, C. (1999). 'Perils on an essential journey: building school community', Phi Delta Kappan , 81 (3), 215.

Scheckner, S., et al., (2002). School violence in children and adolescents: A meta-analysis of the effectiveness of current interventions. *Journal of School Violence*, 1(2): 5-32.

Schwartz, S. H. (2011). Values: Individual and cultural. In F. J. R. van de Vijver (Eds.), A.Chasiotis, & S. M. Breugelmans, *Fundamental questions in cross-cultural psychology* (pp. 463-493). Cambridge: Cambridge University Press.

Seligman, M.E.P., (2011). *Flourish: A Visionary Understanding of Happiness and Wellbeing*. NY: Simon & Schuster Inc.

Seligman, M.E.P, Ernst, R.M., Gillham, J., Reivich, K. & Linkins, M. (2009). Positive education: positive psychology and classroom interventions. *Oxford Review of Education*. 35 (3): 293-311.

Seligman, M.E.P. & Csikszentmihalyi, M. (2000). Positive psychology: An introduction. *American Psychologist*, 55: 15-14.

Seligman, M.E.P. (1998). Learned Optimism. New York: Pocket Books (Simon and Schuster).

Seligman, M.E.P., Reivich, K., Jaycox, L., & Gillham, J. (1995). *The optimistic child*. New York: Houghton Mifflin

Stipek, D. (2006). Relationships Matter, *Educational Leadership*, 64(1), 46-49.

Thoma, S.J. & Ladewig, B.H. (1993). Moral judgment development and adjustment in late adolescence. Paper presented to the *American Educational Research Association*, Atlanta, GA.

Vaillant, G. (2003). *Aging Well: Surprising Guideposts to a Happier Life from the Landmark Harvard Study of Adult Development*. New York: Little Brown.

Weare, K. (2009). In P. Aggleton, , C.Dennison, I. Warwick. (eds). *Promoting Health and Wellbeing Through Schools*. Routledge.

_____ (2000). *Promoting Mental, Emotional and Social Health: A whole school approach*. New York: NY: Routledge.

Wentzel, K. R., & Asher, S. R. (1995). The academic lives of neglected, rejected, popular, and controversial children. *Child Development*, 66, 754– 763.

Werner, E. and Smith, R. (1992). *Overcoming the odds: high risk children from birth to adulthood*. New York: Adams, Bannister and Cox

White, M. (2012). Positive Humanities- Integrating Positive Psychology & Teaching of English Literature. European Conference on Positive Psychology. June. Moscow.

WHO (2008), *World Health Organization. The Global Burden of Disease – 2004 update*. Retrieved December 1st 2011 from:

http://www.who.int/healthinfo/global_burden_disease/GBD_report_200 4update_full.pdf

Young, M. R. R., & Bradley, M. T. (1998). Social withdrawal: Self-efficacy, happiness, and popularity in introverted and extroverted adolescents. *Canadian Journal of School Psychology*, 14(1), 21-35.

Zins, J. E., Weissberg, R. P., Wang, M. C., & Walberg, H. J. (Eds.). (2004). *Building Academic Success on Social and Emotional Learning: What Does the Research Say?* New York: Teachers College Press.

Chapter 12: Culture, Development and Happiness

— Neil Thin, Ritu Verma and Yukiko Uchida

Introduction

Culture permeates everything we do. It is how we learn, how we share ideas and knowledge, and how we accumulate and transform practices across generations. Through cultural processes, humans cultivate individual identity and social relations, and provide larger collectivities with a sense of joint responsibility and affection. Law, business, finance, military capability, science, and love-making, are all just as 'cultural' as spirituality, kinship, dress codes, dance and material art. Since all aspects of our happiness and wellbeing are culturally constructed and learned, for both personal and public responsibilities we need strong cultural awareness. Sometimes, too, it is helpful to single out some kinds of activity as 'cultural' in order to protect or promote them.

Everything humans think and do is cultural. Similarly, culture colours and is inseparable from all aspects of development. Yet culture is a commonly misunderstood and neglected dimension of development (Ura, 2007). Culture is debated because its processes and manifestations are often diverse (making it very hard to define), and because many cultural processes arouse strong passions either for or against 'traditions' and identities. Being diffuse, dynamic, power-laden, dependent on the lens of the viewer, culture is considered by some as being too complex to serve well as a rubric for development planning. But it is too important to ignore.

To be culturally responsible, the new happiness-based development paradigm must be supported by clear cultural analysis and objectives for cultural promotion. We suggest considering 'culture' in two ways:

a. Cultural analysis is needed to appreciate the cultural dimensions of all development, recognizing that people's ways of acting, thinking, and belonging are learned, patterned and trans-generational. For instance, culture reflects how we think about the environment, other living things, our daily practices, and give meaning to them. It influences the way in which we construct ideas of "what is happiness" and "how we live".

b. Cultural promotion is when we single out particular kinds of activity, capability, or artefacts that have more than ordinary significance for wellbeing and are not already adequately promoted under other policy rubrics. This is an unavoidably residual domain that will therefore vary

widely from one country to another. For example, indicative examples and specific usages are outlined using this concept in GNH as put forward by the Royal Government of Bhutan.

Because we know culture is important for development, we dedicate academic disciplines, budgets, targets, ministries and global organizations to studying and promoting it. But if we cannot agree on what it is, or on which aspects of it are 'good', we are ill equipped for improving the wellbeing and happiness of people through cultural promotion. We need a sense of how cultural processes matter before we try to improve some specific aspects of culture through policies and research. We need to strengthen our abilities to talk and think clearly about how culture and happiness interact. Despite the dominance of individual-level orientation in happiness scholarship, research on cultural dimensions of happiness has also been carried out that attempts to aggregate from the individual to the societal or the nation, as reflected in GNH.

The key benefit of the 'happiness lens', coupled with cultural analysis, is that it should render more rational and transparent the processes by which some aspects of culture are singled out for protection and promotion, and others are not. So-called 'critical' cultural analysis is needed here, because claims about cultural value are always intertwined with power relations. This chapter argues not only that culture matters for happiness and development, but that critical analysis is needed to reveal not only cultural benefits but also cultural harms. So first, we try to provide some analytical clarity in the exploration of the 'cultural' values of happiness (intrinsic and instrumental values), based on emerging literature and research on the potentials and barriers of implementing development through a happiness lens. We then discuss cultural promotion (i.e. relevance in terms of research, methodologies and policy), drawing particularly on experiences from Bhutan, the home of GNH, as well as on theories from cultural anthropology, the anthropology of development and cultural psychology.

Intrinsic value of culture

GNH is concerned with the wellbeing of all living things. While there are ongoing debates about whether aspects of culture such as socially patterned behaviour, capacity of language, symbolism and intense sociality applies to non-humans, what is perhaps clear is that culture - understood as symbolic systems, values, and meanings - is a trait characterizing humans (Gibson, 2002; Moore and Sanders, 2006, 4). All our capabilities and our actions, our bodies and our environments, our knowledge, our social relations and institutions, and our fantasies are 'cultural' in that they are to a large extent influenced by roughly collective and trans-generational transmission of knowledge in the form of ideas, beliefs, norms and artefacts (Cronk, 1999; Tomasello, 1999;

Baumeister, 2005; Boyd and Richerson, 2005; Richerson and Boyd, 2006; Henrich and Henrich, 2007). We learn and express ourselves in response to knowledge and beliefs passed to us from others, including from people who died before we were born. Such transmissions rarely occur en-masse, but are adapted, transformed and sometimes resisted. In the sense that these cultural processes constitute the quality of our lives, 'culture' can be said to have 'intrinsic value' in the same way and to the same extent that humanity itself has intrinsic value: no culture, no humanity.

Hence, culture pervades everything we do. Specific cultural practices, however, have values for specific people in relation to their purposes. Although culture is sometimes considered all too pervasive to define, looking at development through a 'cultural lens' means paying more than usual attention to the learning, knowledge and communication processes by which we collectively generate values and meanings. Key aspects of our lives, like money, deities, and norms, are constantly shifting in value and meaning according to their engagement in human exchanges and performances. They are also associated with particular context and historically social groups, locales, disciplines and networks. Development practitioners need to think about how people's preferences, capabilities, and ways of thinking and doing things are socially constructed, learned and changing. If we want to improve wellbeing we need to remind ourselves that anything cultural can be either maintained or changed through conscious choice. If no aspect of culture is fixed for eternity, neither need it be lost through negligence or greed.

For both pragmatic and moral reasons, we must also respect the fact that cultural processes involve deeply-held attachments to symbolic forms of expression and to more intangible indigenous and spiritual beliefs. Culture is also associated with some of our most treasured achievements, collective sense of belonging and sources of meaning. All too often used perniciously to defend unjust and harmful practices, or arrogantly to claim or justify class and gender-based discrimination, culture is a power-laden concept. 'Good' or 'bad', it clearly matters a great deal for our happiness and wellbeing.

Though culture has been 'essentialized' in the past (treated as a single fixed entity or coherent structure associated with specific places and/or groups of people) (Radcliffe-Brown, 1952, Evans-Pritchard, 1940; Malinowski, 1939), contemporary anthropologists and cultural sociologists treat culture as an ongoing fluid process. They are critical of the problematic way human differences were conceptualized as a diversity of separate 'cultures', each with its own coherently bounded culture containing shared meanings, values and beliefs (Moore and Sanders, 2006; Gupta and Ferguson, 1997a; Abu-Lughod, 1993). Rather, people are constantly accepting or rejecting cultural information,

meanings, and values from multiple sources. On the other hand, culture isn't entirely chaotic. It is patterned to some extent, but the pretence of cultural coherence and consensus often comes from people with a powerful vested interest in this construction (Moore and Sanders, 2006, p.10, p.17). Further, culture is not fixed or static, but constantly adapting in response to globalization, technical change, climate change, policy reforms, geo-political shifts, etc. Nor is isolated and disconnected from global forms of social, political and economic processes that connect even the most isolated contexts from a wider world (through migration, education systems, globalized media, etc.) (Gupta and Ferguson, 1997a, pp.2-3). To analyze culture means to think about the construction of our identities, values, knowledge, and behaviours, but also our ways of learning and communication, cognitive styles, and symbolic representations, meanings and relations of power. The concept of 'epistemic cultures', originally developed for the analysis of social relations and knowledge production among scientific communities (Knorr-Cetina, 1981), may be useful to this chapter. This refers to the strong patterning of knowledge and beliefs among persons who share similar sources and modes of knowledge (Knorr-Cetina, 1981; Verma, 2009). Collective action and identity claims, like science, are often pursued in groups that mutually reinforce cultural beliefs, ways of thinking, acting and networks (Latour and Woolgar, 1979).

At the same time, essentialized cultural concepts are increasingly being taken up by indigenous groups, civil society, and national and social movements to redefine themselves in relation to competing or neighbouring groups, or their distinctiveness in an increasingly globalized world (Moore and Sanders, 2006, p.18). They lend support to struggles of indigenous people over their rights to resources in the face of powerful elites, corporations and nation-states (Verma, 2013). Such struggles not only shed light on differences and relations of power between and among such groups, but also the different ways in which happiness and wellbeing is given meaning and significance (Moore, 1993).

Instrumental values of culture and happiness

If we analyze and promote culture through a happiness and wellbeing lens, and more specifically the GNH approach in which it is one of nine domains, the concept is defined by four sub-domains: language, artisan skills, socio-cultural participation and *DriglamNamzha* (the way of harmony) (Ura et al., 2012a; 2012b). Each of these is valuable for analyzing aspects of culture, and is discussed below, together with other additional, alternative sub-domains for considerations, including discussion of 'residual' and intangible cultural considerations. We also reflect later in the chapter how qualitative methods can complement quantitative measurement of cultural values, as well as highlight cases and examples for each existing and alternative sub-domain.

3.1. Language

Language is associated with identity, history and belonging by facilitating communication and connectedness. Distinct languages, dialects, and folklore can also have symbolic importance for maintaining national identity and cultural distinctiveness. Respecting the importance of combating linguistic homogenisation worldwide, the GNH survey asks people how well they can speak their 'mother tongue' as an indicator of cultural diversity and resilience.

Maintenance of distinct ethnic languages is, of course, just one among many possible indicators of linguistic value and identity. And all forms of linguistic distinction are contentious because if they indicate traditions and ethnic cohesion they also indicate and perpetuate divisions between people. And there are many non-linguistic ways of creating and severing connections, and of generating or inhibiting a sense of belonging between people: bodily communication such as music and dance, and the embodiment of knowledge, are also significant in articulating culture and wellbeing.

Language may not be the only way of creating bonds, connections and sense of belonging between people. Non-linguistic forms of communication, such as body language, music, dance and the embodiment of knowledge, are also significant in articulating culture and wellbeing. Although complex, it may also be useful to consider the concept of discourse, defined as normative ideas, attitudes, beliefs and practices that construct subjects and aspects of the world with certain interpretative power. Discourses point to power relations and exercise by control over narratives (what can be spoken of), rituals (where and how one may speak), and power and privilege (who may speak) (Foucault, 1972).

3.2. Artisan skills: zorig chosum

Artisanship is a very loose category referring to traditional and creative activities that are socially valued in principle but undervalued by the free market. This might expand to include activities such as the performing arts (theatre, music, drama, dance, etc), literature (fiction, non-fiction, poetry, story-telling, etc.), visual arts (film, painting, sculpture, photography, casting, etc.), crafts (weaving, textiles/embroidery, carving, bamboo works, leatherworks, paper-making, etc.), blacksmithing, gold and silver-smithing, carpentry, masonry, and sports and other activities. In particular, GNH engages in thirteen elements of art and crafts considered important for cultural capital and for preserving a living and vibrant culture, especially those that have a long history and are deeply embedded with spiritual significance (Ura et al., 2012b, p.146).

The positive 'cultural policies' label is often used in the restrictive 'arts' or 'arts, leisure, and sports' senses, although it can be used in a more holistic way (see

Owen-Vandersluis, 2003; UNESCO, 2011). In some cases, especially in western contexts, this sense of culture often overlaps with what is considered 'highly sophisticated' artistic capabilities and objects that are associated with being 'civilized' and having a life that is not restricted to mundane drudgery. Along with 'heritage', this tends to be the core, default referent of cultural ministries and budgets, of the common restrictive sense of 'cultural policy' (Meredyth and Minson, 2001; McGuigan, 2004), of fine arts disciplines and study of material culture (a sub-discipline of anthropology), and of the young and rapidly growing sub-discipline of 'cultural economics' (Ginsburgh and Throsby, 2006; Towse, 2010).

In some parts of the world, art is embedded in everyday life rather than segregated in elitist forms. Mostly, however, different art forms compete for attention and valuation, and are associated with claims not only to class, creativity and cultivation, but also 'indigeneity' and 'identity' in such forms as ethnic architecture, tattoos, dress, material culture and artefacts related to modes of production.

3.3. Socio-cultural participation

In its 'verbal' sense of activities, culture can refer to participation in events such as festivals, rituals, and performances, which support the social bonding and the ongoing exchange of knowledge. Such events are valued both for the direct enjoyment (Putnam, 2000) but also for their role in perpetuating active cultural continuation and creativity (Ura et al., 2012a; 2012b) and generation of 'social capital' with its many spin-off benefits such as trust and cooperative capability (Putnam, 2000). Research suggests positive effects of participating in social and cultural events on health, self-esteem and a sense of belonging (Chouguley, Naylor and Rosemberg-Montes, 2011).

While GNH measures the number of times individuals participate in events and festivals, what perhaps requires further analysis is the qualitative depth and meaningful engagement in such events by differently positioned individuals. For instance, there are often differences in the engagement of women and men in enacting public speeches, rituals and rites that are related to relations of power and knowledge creation that disadvantage women; such an analysis is also likely to yield useful insights and recommendations for policy. Similarly, such research might also help in understanding of differences of the quality of engagement of such practices by youth and older generations, and the differing degree of meaning they might attribute to them. In turn, such knowledge may be critical for policies and actions towards preserving certain aspects of culture that depend on trans-generational learning and may be under threat.

'Cultural diversity' is often associated with the term 'tradition', conjuring up an image of multiple essentialized 'cultures' being allowed to persist side by side, in strong association with ethnically 'distinct' populations. Later in this chapter, we discuss the problems with such understandings of culture. In its more fluid, verbal sense of 'learning', by contrast, culture is always self-evidently diverse: every human becomes multiply enculturated from a wide variety of kinds of people, sources information, and encounters. The task at hand for happiness research is to both quantify and qualify socio-cultural engagement and participation over time.

3.4. Driglam Namzha: The way of harmony

This sub-domain is a uniquely Bhutanese expression referring to a more widely applicable role of dress, consumption habits, attitudes and body language, etc, in expressing and generating social harmony, especially in formal settings (Ura et al., 2012a; 2012b). This quality is measured through two indicators that assess its perceived importance and perceived change over time.

Considered in this diffuse sense as a 'way', culture can be understood as a set of activities and expressions which need to be repeated to maintain the social qualities desired. It can also be reified, considered as a fixed thing that persists through time, allowing us to talk of 'cultures'. This reification in turn leads to a problematic understanding of 'cultures' as having collective 'cultural capital' or 'heritage', with 'cultural continuity' across generations, with boundaries and emphasis on difference. It sometimes also refers to specific kinds of environments and settings, and hence with the concept of 'cultural diversity' emerges when comparing between such environments or locales. This kind of meaning can also be found in concepts like 'organizational culture' or 'school climate', which refer to fairly intangible patterns in rough collective attitudes and ways of doing things in certain settings.

Alternative sub-domains and processes for consideration

It may be useful to consider alternative and additional sub-domains not covered by GNH, but that might be useful for measuring happiness related to culture. These include issues of identity, social institutions and residual/intangible/misunderstood aspects of 'culture'. We also reflect on cultural elements and processes to help the analysis further.

4.1. Identity

The term identity tends to be associated with particular epistemic cultures, places, organizations, networks or cognitive styles such as holistic vs. analytic attention (Nisbett, 2003). The emphasis tends to be on the sense of belonging in a group rather than necessarily on rootedness in the past. In this sense, it is also associated with boundaries and differences but also with 'multicultural' or

'pluralist' policies, for coping with or celebrating difference within nations or organizations. Cultural identification sometimes leads to legal and ethical exceptionalism and 'cultural rights', and with the concept of cultural identity clarity (i.e. a clear cultural identity which allows individuals to construct clear personal identities, and therefore achieve self-esteem and wellbeing), which has been shown to correlate strongly with indicators of subjective wellbeing and self-esteem (Usborne and Taylor, 2010; Hodder, 2010).

For the purposes of GNH, it may be useful to measure cultural identity and sense of belonging to a particular epistemic culture or locale. Given the correlation between wellbeing and cultural identity clarity and cultural competence, indicators might investigate the degree to which an individual defines, perceives and engages them.

4.2. Cultural capital and institutions

Cultural capital, assets and practices associated with personal distinction(s) associated with social stratifications such as gender, age, ethnicity, class, martial status, caste, etc. The dynamics and motives associated with cultural capital can be associated with zero-sum class, inter-ethnic or interpersonal status competitions (Kim and Kim, 2009). But it can also be about distinguishing an aspirational from an actual self, or a past from a present self, and in those senses be more positively about the roles of cultural resources in self-making and community development (Phillips and Shockley, 2010).

Socio-cultural institutions are cultural patterns, practices or relationships that are created, organized, reinforced and transformed by different epistemic cultures. They include kinship and family; political, legal and governance organizations; spiritual and religious organizations; economic systems; work and modes of production; social organization (marriage, status, authority, safety nets, etc.), education, health, etc. Socio-cultural institutions, like culture, are rarely fixed and bounded, but are actively negotiated, transformed and resisted over time. They are also inseparable from people's values, beliefs and meanings about the world, and are related to wellbeing and happiness in man ways. At the same time, they are often not obvious and sometimes "hidden" from view, except to sociologists and anthropologists who systematically study them. They are infused with relations of power, which drive them and pattern actions and behaviours. It will be useful for future analysis and assessment of culture to consider exploring the way different women, men and children engage in cultural capital and institutions, including both the breadth and depth of such engagements through quantitative and qualitative methods.

4.3. Residual, intangible aspects of culture

Culture is frequently used in a residual sense of referring to the many neglected, unseen, intangible, symbolic but important aspects of what we do. 'Culture' in this sense is invoked not to explain anything, but to prompt enquiry when unexplained patterns of behaviour become troublesome. For example, indigenous systems of environmental management (irrigation, pasture conservation, soil conservation, pest control, forest conservation, etc.), not only have their own logic but also scientific merit, but often remain 'invisible' to development practitioners, engineers and scientists (Verma, 2009; Lansing, 1987; Richards, 1994; 1993; Fairhead and Leach, 1996; 1995; 1993).

It is perhaps this sense that UNESCO uses when referring to culture as 'the most neglected dimension in strategies to achieve the MDGs' (UNESCO, 2011, p.17). Evidently poverty, reduction, schooling, medical care, all the rest of the core MDG-focused activities are clearly cultural, but the critique here refers to the inadequate recognition of the cultural factors affecting progress towards these goals. However, the ability to recognize and cope with the various challenges posed by ill-understood cultural differences is referred to as 'cultural competence' or 'cultural intelligence' (Ang and Van Dyne, 2008).

A different way of analysing culture is to distinguish different generic cultural processes that scholars and policy-makers might want to appreciate with a view to influencing culture. In relation to and crosscutting the GNH sub-domains, these multiple manifestations and elements of culture can be classified into five areas: i) values and attitudes, ii) identities/roles, iii) beliefs/knowledge, iv) capabilities; and v) material environments/artefacts. Since culture is varied and fluid, and to appreciate how these various cultural elements are transformed, we also need to think analytically about the social processes through which it is continually being generated and re-interpreted. Our understanding of these cultural elements can also be helped by distinguishing the various processes in which people adopt, negotiate, and demonstrate their cultural differences by inheriting, learning, sharing, cultivating, and resisting. Table 1 provides an overview of how cultural manifestations and processes interact. It can perhaps serve as an analytical tool, with indicative text, for sketching out the range of cultural processes that scholars and policy-makers might want to consider when supporting positive aspects of culture.

	Inheriting	Learning	Sharing, bequeathing	Cultivating	Rejecting
Values, attitudes,	Strong patterns such as individualism, hierarchy, and status consciousness are passed down the generations	Values are learned from parents and other carers, siblings, teachers, public media, literature, etc.	We communicate our values to other people through expressions, judgements, and actions	Values are too deep for direct manipulation, but nations, schools, and employers try to promote values	New values are often generated through explicit rejection of old ones
Identities, roles	Sense of belonging, and specific functional roles and identities, may be inherited from one or both parents or from other relatives.	Identification with groups or networks of other people is learned through ritualization and schooling	Both shared and individual-specific identities and roles only exist insofar as they are communicated with complicit others	Identities and roles may be deliberately created, modified, or enhanced for practical or strategic purposes	Social transformation can happen through explicit or tacit rejection of identities and roles
Beliefs, knowledge	Strongly held beliefs are often foundational – i.e. associated with mythical creators, ancestors, or culture heroes	Most of our knowledge is learned implicitly, through observation and imitation, often unconsciously	Beliefs are socially contagious, and so is scepticism	Writing and cyber-storage have revolutionized human ability to store, accumulate, and deliberately evaluate and compare knowledge	Beliefs may be questioned and rejected on scientific or emotional grounds, or due to adverse associations with people or events
Capabilities	These can't be directly inherited, though often people believe this	Early learning is particularly essential for some abilities such as language and	Arrangements for spreading abilities through social	Most abilities require active practice rather than mere acquisition of	Since we have an almost limitless variety of potential

		music	networks and groups are crucial aspects of cultural transmission	know-how	abilities, growing up involves active rejection of many of these
Material environment and artefacts	Individually and collectively we inherit built environments, modified landscapes and artifacts	We learn how to maintain and use environments and things bequeathed to us	We pass on modified landscapes, tools, etc to future generations	Many environmental goods and artifacts require active continuous maintenance and cultivation	To make room for new forms of material organization we often have to destroy goods that we inherited

to be so (e.g. in the idea of genetically transmitted musical ability) appears in the first data cell of the top row.

Table 3: *Cultural elements and processes*

Intrinsic vs. instrumental values of culture

Although humanity got by without ever theorizing 'culture' until very recently, most global organizations and academics now agree that culture matters a great deal both intrinsically and instrumentally. Being all-pervasive, hard to define and analyse, and often highly complex as we have shown above, culture is not easily amenable to deliberate transformation. Would-be protectors or transformers of any aspect of culture will do well to sharpen their ability to analyse culture critically and reflexively as a way of improving the rationality and transparency of what they are trying to achieve. A 'happiness lens' is helpful in this regard.

5.1. 'Culture' through a happiness lens

Looking at cultural processes through a happiness lens means that we interpret the values, power relations, meanings and justifications underlying cultural processes with respect for how people experience them. A happiness perspective requires us to reject naïve fundamentalism, traditionalism, or modernism: cultural values, practices and beliefs are never valuable or virtuous simply because they exist, because of claims they are divinely inspired, or based on a modernist zeal for cultural innovation. Creativity and culture-sharing, like indigenous practices, are not necessarily 'good' in themselves but need to be assessed in reference to people's subjective experiences and their contribution to wellbeing.

Nearly all humans want not only personal happiness but also to live in what they perceive to be a good society, and in order to fulfil these needs, both of these preferences require culture. Since we are uniquely 'cultural' beings, culture in this very diffuse sense has intrinsic value. This matters because we should not instrumentalize 'cultural capital' (or 'social capital') as if it mattered only insofar as it affects the 'economy'. Living in what is perceived as a good society, facilitated by roughly similar cultural practices of which we are proud, has intrinsic value. We value the quality of our social and cultural environments more for their direct contributions to our quality of life and wellbeing than for any indirect benefits that might flow from them. For example, a friendly, supportive, calm, lively, and purposeful school or workplace 'climate' or 'culture' may well be valued by school boards or employers primarily for its productivity dividends, but for schoolchildren and work staff these environmental qualities matter intrinsically.

Since this 'cultural' attribute applies to both 'good' and 'bad' qualities, we can't afford to assume that either culture or cultural diversity are intrinsically 'good'. Culturally practiced humiliation or torture of people or animals has always existed but there is no 'intrinsic value' justification for such practices. We also need to consider that what might be viewed as 'good' for one group of people or even within a particular epistemic culture, may not be perceived as such by others, both within or beyond the group. One of the core principles of GNH is its focus on the collective good, which is somewhat different from Western approaches that focus more on individualistic goals. This must be defined reflexively, noting that power and status inequalities often restrict some people's ability to express their true feelings about the experiential value of cultural practices.

However, questions arise about who defines the collective 'good', and on behalf of whom. As such, perhaps the most important implication of using a 'happiness lens' in policy-making is the insistence on transparent evaluation and analysis of everything we do by reference to an ultimate collective goal of happiness, defined by scientifically accepted domains. Using this evaluative lens, no aspect of culture can be defended solely in terms of its 'intrinsic value'. It is most important that the collective is defined reflexively, keeping in mind relations of power that might marginalize certain groups of people. In short, the defence or promotion of existing or new cultural practices, beliefs, or artefacts must be done with reference to their contributions to happiness.

This leaves, of course, a great deal of room for debate about whether anything, on balance, is better for our happiness. Whose happiness counts? What kind of happiness matters? Do we mean just this-worldly happiness or happiness in an imagined life hereafter? Does happiness mean gaining merit through good

deeds in this life for the collective good, while giving less weight to our individual needs? Or does the collective good have greater weight, as in the GNH approach? Such debates are not easily settled, but neither can we afford to use this as an excuse for not using the happiness lens to evaluate our cultural environment and to choose and justify our cultural policies on the basis of the best available evidence about how culture and moral choices influence wellbeing (Harris, 2010, p.9).

5.2. Cultural diversity through a happiness lens

Rather more controversially, it can also be argued that cultural *diversity* is in general more benign than cultural homogeneity because it allows a wider variety of ways in which people can flourish. In any given cultural context, some people's personalities will 'fit' better (for optimizing their wellbeing) with dominant cultural traits and power relations than others' do. Culturally diverse societies (and organizations like schools, communities, and workplaces), therefore, which effectively offer a wide variety of values and of valued occupations, are likely to perform better at facilitating wellbeing than more restrictive and homogeneous cultures in which a smaller set of values and valued occupations or products are dominant because in more diverse societies more people will be able experience a sense of 'cultural fit', 'personality-cultural match' or 'cultural consonance' (Ratzlaff et al., 2000; Lu, 2006; Fulmer et al., 2010; Reyes-Garcia et al., 2010).

A diversity of cultural options can make individuals more resilient to the inevitable shocks of life, while also making groups more resilient in the face of major socio-economic or environmental upheavals. Nonetheless, diversities (for example language barriers, value confusions, intergenerational contradictions, mutually exclusive norms) often come at a high price in terms of social harmony and personal sense of wellbeing or meaning. Since culture is always diverse, its quality and its influences are what matters, not its diversity per se. Cultural diversity must, however, be traded off against the benefits of shared cultural values.

There are also severe transitional costs to people who have grown up with one strong set of values and who are suddenly exposed to a radically different cultural context (Baumeister, 1986). 'Culture shock' and 'cultural identity confusion' are two names for a wide variety of psychosocial conditions associated with rapid cultural transitions which are made all the worse when host populations are unsympathetic and when individuals perceive the cultural changes as ones they have not voluntarily chosen for themselves (Usborne and Taylor, 2010).

Nonetheless, human lives are in general enriched through exposure to diverse cultural practices, cultural products and knowledge forms, and impoverished by restriction of such exposure. Our lives can be enriched through such exposure even if we reject many of these as unappealing. Intercultural empathy is becoming ever more important in a culturally globalised world, so we all need to learn to understand and respect diverse cultural practices even if we don't always like them. Conversely, our wellbeing can be harmed when others deliberately or unintentionally disparage our cultural practices or restrict our freedom to express our sense of cultural identity.

We must, therefore, respect two kinds of *qualified* cultural considerations: i) exposure to cultural diversity (provided that the benefits of the beliefs and practices outweigh the costs), and ii) freedom to express our cultural identity (provided that in doing so we don't cause avoidable harm to others). Bearing in mind these crucial qualifications, we can expect that both the preservation of cultural heritage and facilitation of cultural diversification are better than allowing heritage to be lost, practices to wane, and global culture to homogenize. Exceptions to this default valuation of diversity would, of course, be cultural practices that are known to cause avoidable harm. For example, many cultural traditions endorse medical and ritualized treatments which cause severe and unnecessary bodily mutilation and psychological harm: if we recognize these as such, it is disrespectful and dishonest not to question the morality of such practices, especially if we know that vulnerable people are exposed to them. *Any policies promoting respect for cultural diversity must, therefore, be qualified by attention to the possibility of harmful cultural practices.*

Since human purposes are culturally constructed, the 'instrumental value' of everything we do is cultural. Neither culture nor cultural diversity are in themselves conceptually fixed enough to associate them plausibly with any kind of generalized instrumental value. Promoting happiness with a cultural lens must therefore involve looking at people's diverse purposes, and considering carefully the cultural means, social processes and power relations through which they are learned and pursued. An instrumental approach must also ensure that the views, needs and realities of those being considered are at the centre of our efforts, including any unintentional harm that may arise from even the most well-intended cultural interventions.

Emotionally, it is often difficult to engage in rational discourse about deliberate modification or transformation of culture, due to people's strong and even unconscious attachments to particular cultural symbols, values, and practices. The prevalence of texts on the growing cacophony of 'culture wars' worldwide testifies to the fact that some aspects of culture provoke strong emotional reactions that quickly lead to intransigence and to unhelpfully polemical

debates (James, Plaice and Toren, 2010; Dallmayr, 2010). This should not surprise us, given that many of civilization's bloodiest and most undignified (and to outsiders, downright silly) battles have been fought over religious beliefs, language, rituals, and even clothing.

Optimistically, various development organizations and United Nations agencies have promoted 'cultural diversity' (UNESCO, 2009) and 'cultural liberty' (UNDP, 2004) as ways of seeing beyond the mire of cultural chauvinism and culture wars. These are noble aims though they are unlikely in themselves to influence people who are strongly wedded to intolerant cultural values which don't respect people's freedom to choose their own values and practices.

5.3. Cultural psychology through a happiness lens

At the most general level, conceptions and valuations of happiness and the individual self are strongly influenced by culture. Happiness research by cultural psychologists has demonstrated that there are strongly regional patterns in the degree to which happiness and its public expression are valued and expected (Kitayama and Markus, 2000; Diener and Diener, 1995). Indeed, what constitutes happiness can be different across different epistemic cultures, thus highlighting its socially constructed nature. Cultural construal of happiness, defined by the lay theory or definition of happiness in each culture, are shared within a culture and constructed through socio-cultural experiences, such as formal or informal education and exposure to cultural products. So far, this line of research has been somewhat restrictive in its scope and approaches, focusing mostly on broad-brushed East-West and individualism-collectivism contrasts based on survey or experimental data. More research is needed on more finely nuanced issues, in a greater diversity of contexts and populations, and using ethnographic and oral history approaches which will promote appreciation of the ways in which all individuals are constantly adjusting to multiple cultural influences.

Nonetheless, interesting findings have already highlight important cultural patterns. For example, North Americans and Europeans broadly define happiness as a positive emotional state that is typically construed as a state contingent on personal achievement (Kitayama, Mesquita and Karasawa, 2006). Negative features of the self, including negative emotional states are perceived to be a hindrance to happiness. Asians, by contrast, though most broadly value and expect happiness, are significantly more likely to expect and show an interest in emotional balance among the full range of emotions (Kitayama, Mesquita and Karasawa, 2006; Uchida and Kitayama, 2009) and to consider happiness in terms of expected future lives or otherworldly existence as a dialectical thinking style. For example, it has been suggested that reported intensity of pleasant and unpleasant emotions were negatively correlated in the

United States where as they were positively correlated in China and Korea (see Bagozzi, Wong and Yi, 1999; Kitayama, Markus and Kurokawa, 2000). In East Asian cultural contexts, people tend to evaluate their current state of happiness by taking ups and downs in life as a whole into account (Ji, Nisbett and Su, 2001). Therefore, if people recognize that their current state is not good enough, but expect it to be improved in the future, their current "unhappiness" is not very negative. Furthermore, in Japan, where interdependent orientation is salient, being outstandingly happier than others is taken as disharmonious within relationships. Indeed, when collecting the variety of meanings and consequences of happiness, over 98% statements were described as positively in the US but only 67% statements were described positively in Japan since they have both transcendental ideas (e.g., happiness does not last long) and afraid of negative social consequence (e.g., jealousy from others) (Uchida and Kitayama, 2009).

Therefore, in most cases, East Asian cultures show raw scores of happiness and life satisfaction scales than European or American societies (Diener, Diener and Diener, 1995). The reason of the low level of wellbeing is partly because of the definition of happiness and its measurement. "Standardized" scales that are mostly devised in European-American contexts are sometimes invalid when used in some other cultures, since those measurements are based upon personal achievement and attainment (e.g. Uchida and Ogihara, 2012). Thus, it is important to consider context-specific concepts of happiness in each culture and how they are attributed different meanings and values.

At an abstract level, conceptions of happiness can be seen as 'universal' in terms of satisfaction with one's accomplishments and relationships; however, the degree to which each of these factors is emphasized and predicts happiness vary substantially from culture to culture. Furthermore, connotations of happiness also differ, such as incremental views of happiness observed in European-American cultures and dialectic views of happiness observed among East Asian cultures. African, Latin American and Polynesian understandings of culture also have different connotations, as well as variances across these heterogenous regions. Cultural differences are found not only at the individual psychological level but also at the macro level, such as within societal systems, institutions, and among scientific meta-theories. We have to illustrate not only cross-cultural differences but also illustrate cultural/societal changes over time in regard to happiness and wellbeing within nations or communities. Hence, disaggregated data are critical.

Culture and happiness: Development, research and recommended policies

Although there are literally millions of publications on various 'cultural' themes, and some research on culture and happiness in recent years from various disciplines, there is remarkably little *systematic* research either on how culture matters for happiness within development, or on how development-focused policies can make transformative differences to culture from a happiness perspective, or on the pressing gaps in research and possible methodologies for addressing them. In this section, we move from debates on the intrinsic and instrumental values of culture to a discussion of development, research gaps and methodologies, and actionable policy considerations, practices and recommendations in relation to happiness and wellbeing.

6.1. The role and power of culture in development

Bhutan's GNH framework gives 'culture' equal weight within a trans-disciplinary framework of nine domains. This in itself is considered a good practice, in contrast to way culture is sometimes marginalized in numerous development frameworks, organizations and discourses. In this particular moment of history, market-oriented and economically led discourses prevail, in turn giving greater weight to what are considered "technical sectors" (such as agriculture, infrastructure, mining, genetics, etc.) dominated by bio-physical scientists, engineers and economists (Cernea and Kasssam, 2006; Cernea, 2005; Ura, 2007; Verma, Russell and German, 2010; Barrett, 2008; Barrett et al., 2009). Although people's lives are not lived by "sectors", development has tended to be constructed along sectoral lines. Within such a context, culture becomes undervalued if not invisible.

In line with a "sectoral" approach (or superficial claims to be "integrative"), dominant development approaches are often constructed in ways that reduce complex realities and issues to "blue prints" or "technical problems" requiring "technical solutions" (Ferguson, 1994; Roe, 1991). It is also this same operation that suspends socio-cultural and power relations from development. To isolate culture as a pillar of development is to create an artificial compartmentalization for instrumental and rational purposes (similar to compartmentalizing economics, environment and social issues and other pillars in the development of the SDGs). Isolating certain practices and goods for attention in this way can often be helpful, especially if they are otherwise neglected, undervalued, or underinvested in by planners and consumers. But this inevitably selective approach must not detract from the more important requirement of recognizing culture in all aspects of development. Culture has in recent years increasingly been referred to as the fourth 'pillar' of development (Hawkes, 2001, UCLG, 2010; UNESCO, 2011). At a more critical level, as with the 'economy, environment, society' troika of the 'three pillars' (Thin, 2002, ch.1), it is useful to

reflect on what is gained, and what is lost by trying to contain diffuse entities into self-contained 'pillars'.

Although often neglected and at the margins of development (Ura, 2007; Cernea, 2005; Verma, Russell and German, 2010; Barrett, 2008; Barrett et al., 2009), it is worth considering how culture is handled in dominant development discourses and organizations. For instance, when development organizations such as UNESCO do in fact elaborate on cultural dimensions of development, they habitually produce think pieces which betray incoherent statements about culture. Typically, these amount to romanticized, unproblematized, uncritical and grossly over-generalised claims about the 'goodness' of culture, such as that 'culture guarantees a more satisfactory intellectual, emotional, moral and spiritual existence' …and that it 'provides the basis for trust' (UNESCO, 2011, p.5).

Agencies like UNESCO that are charged with the development of policies and knowledge management relating to this over-generalized, overworked understanding of 'culture' often end up doing with worryingly little recognition of the global prevalence of harmful cultural beliefs and practices, or of cultural constraints on individual and collective progress. It is of course not only futile but also downright dangerous to pretend that 'culture' is in general a benign resource for human betterment free of power relations, or to deny that many of humanity's most wonderful achievements have been derived from bitter struggles *against* particular and dominant cultural beliefs and practices. It should also be obvious that if culture can be harmful, more cultural diversity is not necessarily desirable. Clearly agencies tasked with cultural development stand in dire need of the critical engagement and evaluative scrutiny of the happiness lens, while ensuring that their taken-for-granted assumptions are critically analyzed and made transparent. On the other hand, the same can be said of those who demonise culture as if it were a solid 'barrier' to development or to the achievement of human rights. An important question here is who is being 'developed', whose culture is considered an impediment to 'development', and who is developing and evaluating of 'culture', using what frames of analysis. Often, it is useful to analyze such questions through the lens of power, while paying discerning attention to dominant forms of knowledge, as well as alternative and indigenous understandings and framings of the question.

It is also worth keeping in mind that aspects culture can undermine or prevent positive transformative development from taking place. Anthropological research of development highlights that an overly technocratic culture of development programmes, projects and organizations prevent them from achieving their intended goals (Verma, 2009; Ferguson, 1994; Roe, 1991).

Moreover, the culture of development practitioners themselves creates more disconnect than meaningful interface with the intended beneficiaries in rural communities where development is often deployed, and is in itself an important subject of study (Verma, 2011; 2009; 2008). Hence, carrying out research on what is normally considered "hidden", including the unintended harm or negative consequences of development programmes and polices on people, their culture and environments, is critically important for understanding what happens when development interventions are actually deployed (Verma, 2009; Ferguson, 1994). What this would mean for GNH and the new happiness based paradigm is carrying out simultaneous ethnographic research of the impacts of interventions, policies and processes of development, with a focus on the voices, experiences and perspectives of women, men and children whose very happiness and wellbeing we are hoping to promote, as well as the promoters themselves.

As culture is varied and fluid, we need to think analytically about the social processes through which it is constituted, as well as transformed and resisted. Hence, cultural policies and interventions are not transmitted "en bloc" to passive communities and individuals, but are actively negotiated, contested, bent and co-opted to meet the needs of different individuals (Sikana, 2010). Women and men exert their agency by constructing identities (i.e. "poor farmer", "poor community", etc.), position themselves to acquire development resources to meet their own needs (Sikana, 2010; Li, 1996; Mosse, 2005; Verma, 2009), or dis-adopt, reject or resist development in sometimes "hidden" ways (Scott, 1990; 1985; Abwunza, 1997; Sikana, 2010). This is often in response to techno-centric, top-down development interventions that do not take into account the needs, perceptions and voices of those whose happiness and wellbeing we want to improve. As such, transparency, reflexivity and critical, trans-disciplinary and holistic research that recognizes human agency and needs are important (Verma, German and Ramisch, 2010).

Research gaps and methodologies

In developing a new happiness based development paradigm, it is worth considering gaps that exist in discussions of culture, as well as methodologies that could potentially deepen its assessment and analysis. Given the broad field that is the study of culture, some gaps that exist in the assessing culture within a new development paradigm based on the GNH index have been outlined earlier and include three alternative and additional sub-domains of identity, cultural capital and institutions, and residual/intangible aspects. These together with the GNH sub-domains of socio-cultural participation, artisanal skills, language and *DriglamNamzha*/the way of harmony, may help to nuance and deepen the analysis of culture in different contexts across the world. Some other gaps in developing the new development paradigm identified during the

IEWG meeting in Bhutan in early 2013 include the absence of African, pastoral, indigenous, gender and youth perspectives from a cultural lens. These must be given special attention in the future to ensure the valuable concept of GNH is deepened to include the perspectives and voices of all groups of people, including those are sometimes excluded and marginalized from development. In practical terms, this would mean ensuring a more culturally, disciplinary, age and gender balanced international expert working group for the happiness based development paradigm, adding a new domain on gender and indigenous knowledge within the GNH framework, as well as including case studies and conceptual framings of wellbeing and happiness based in African, indigenous and pastoral contexts.

Future cultural psychological and anthropological research might also reflect on varied emphasis in different cultural contexts on individual versus collective wellbeing. As discussed earlier, Western perspectives often focus on individual wellbeing, whereas GNH, Asian, African and other perspectives might value collective wellbeing with greater weight. That the collective and individual are sometimes in tension with one another is useful to consider when evaluating different culturally defined notions of happiness. In doing so, we might also reflect on power relations among and between individuals through "searching questions about how the 'cultural rules of the game' got made, by whom, and for whom" (Gupta and Ferguson, 1997, p.4; Crush, 1995). Hence, different aspects of 'culture' play varying roles in contributing to the happiness and wellbeing of differently positioned women and men in different life stages and in different parts of the world. For instance, particular men and women might defend their particular interests in the name of culture and collective wellbeing. In Central Kenya, for example, it is often men who define and re-interpret cultural norms around patrilineal land inheritance in the name of 'protecting' the clan, even when these same norms allowed for certain women and widows to inherit land in the past (Mackenzie, 1995). In shifting political-economic circumstances, women are losing their rights and security over land as men strategically re-interpret cultural norms and customary laws to their own advantage (Mackenzie, 1995; Verma, 2001). Power relations are critical in analyzing the tension between the collective and individual within culture, where certain sub-groups are privileged while others are disadvantaged in the name of the "collective". This can be particularly important in situations where some development organizations such as the World Bank rush to "return to the customary", without considering the negative impacts on women in particular (Mackenzie, 2010; Whitehead and Tsikata, 2003). Here, processes and negotiations by which cultural norms are constructed and "protected" are critical for analysis (i.e. the role of elders, customary institutions, discourses, processes of exclusion, broader processes, etc).

Further, future research might consider certain questions about the relationship between culture and happiness within the context of development. Are some cultural beliefs, practices, and values systematically linked with better happiness outcomes than others? Can we identify some kinds of socializing process (parenting and care-giving styles, schooling, rituals, religious affiliation, community activities) that are strongly associated with better happiness outcomes? To what extent can such features be identified, can and should they be deliberately cultivated and transformed, and other less happiness-friendly features deliberately discouraged or forbidden? To be happy, is it beneficial to have a strong sense of belonging to a particular long-standing cultural tradition, or it is just as good or better to feel free to choose from a wide smorgasbord of cultural options? What are the implications for public happiness promotion of recognizing the many ways in which happiness is culturally learned? In what ways are dominant development approaches inductive or not inductive to supporting culture and happiness?

As with the measurement of happiness, so too with culture there exists unavoidable trade-offs between the wish to have 'robust' numerical data and the wish for in-depth understanding of complex processes. Combining quantitative with qualitative assessment will likely to lead to both an understanding of how common a practice is, as well as why it so for whom, when and what meaning(s) it has. In other words, while quantitative and statistical methods measure how widespread happiness is from a cultural lens within a snapshot of time (i.e. number of people who are happy or not, or how many times a certain cultural practice is engaged), qualitative methods investigate how differentially positioned people think over longer time frames (normally ranging from 6 to 24 months) and what meanings and significance they attribute to happiness based on their perceptions, experiences and actions. Most importantly, findings from both methods can be compared, contrasted, thereby providing a means for triangulating findings, and where discrepancies exist, more fine-tuned research can be carried out.

The study of culture is more often carried out through qualitative methods by anthropologists, with a focus on ethnographic research which includes a combination of participant observation, interviews, focus group discussions, textual/discourse analysis of documents, visual methods, questionnaires/surveys, etc. Unlike quantitative methods, such methods normally require a long presence in the field, which is rare in development research and practice[1], but necessary given the many failed development

---

[1] In the context of development, participatory rural appraisals are often used (PRA methods include transects, wealth ranking, timelines, feedback sessions, social mapping, etc.).

projects and research technologies that are not adopted, dis-adopted or resisted by beneficiaries of development over time (Misoko, 2010; Sikana, 2010).

Ethnographic methods are well aligned with the core principles of GNH, which emphasizes holism, interdependence and interconnectedness (Hoellerer, 2010). Through methods where researchers immerse themselves into a community, they aim "to gain a holisitic perspective of human beings and their interrelationships with all aspects of human life" (Robben et al., 2007, p.4, cited in Hoellerer, 2010, p.38). Hence, anthropological and ethnographic research is perhaps the most useful and fitting research method in measuring happiness and wellbeing policies and effects (Hoellerer, 2010) especially in relation to understanding subjective emotions regarding culture and wellbeing.

While quantitative methods are useful in measuring cultural values, it is perhaps equally important to strengthen people's ability to have intelligent conversations about culture. The inevitable simplification of numerical assessment risks down-playing those conversations. As discussed earlier, it is also ironic that at the moment where anthropologists debate and deconstruct the concept of 'culture', indigenous groups, civil society and social movements are increasingly using it to defend their 'traditions', rights and claims to territories (Moore and Sanders, 2006). In order for policy-making to avoid falling into traps that either romanticize culture or problematically regard it as bounded, fixed, rigid and inherently coherent, it is better understood as dynamic and fluid, and actively being created and recreated, interpreted and re-interpreted by women and men (Gupta and Ferguson, 1997b, p.14). 'Culture' is a site of common understandings of sharing and commonality, *as well as* a site of difference and contestation (Gupta and Ferguson, 1997b, p.14). In order to capture these aspects of culture methodologically, it is important to "write against generalizations" to counter the tendency make other 'cultures' seem more coherent, bounded and different from ourselves than they might be (Abu-Lughod, 1993, p.7).

Lastly, we think it is useful for the study of happiness and wellbeing from a cultural lens to reflect on the most recent innovations in conceptualizations and ethnographic approaches developed in the study of international development. Recent scholarship suggests that the importance of paying attention to the complexity of policy making, implementation and the way development is negotiated and contested by variously positioned actors (Mosse, 2005). For instance, research on the social and cultural lives of development projects, organizations and professionals, points to the diversity of interests, perceptions and actors beyond formal policy models (Mosse, 2011; 2005; Verma, 2009).

Happiness-focused cultural development policies

In its more fluid sense, culture as the subject of policy has various characteristics worth summarizing here: it is a holistically composed web of interconnected domains that is dynamic; it is socially constructed (though not usually with much systematic planning) over many generations; it arouses passionate attachments; it is often resistant to deliberate change; and it is inseparable from relations of power and knowledge production. Moreover, there are four overlapping and interconnected barriers to implementing cultural policy: conceptual diversity, elusiveness, emotional resistance and hegemonic technical development approaches.

The crucial message concerning the happiness lens is that it is a potentially very powerful and complex lens for cultural analysis and promotion. Though culture in itself is neither 'good' nor 'bad', there are elements of culture can be considered as such. There is intrinsic value in the enjoyment of cultural belonging(s) or cultural identity clarity, as discussed earlier. Cultural diversity and diversification can also be valuable, through the provision and expansion of choice, provided that the costs to coherence and continuity are not too great, and that service delivery is amenable to cultural competence. Most importantly, engaging happiness in any aspect of cultural policy requires policy-makers to be as transparent as they can be in justifying cultural practices in relation to positive and negative subjectivity, across life domains, through the life course and pertaining to differently positioned women, men and children in varying contexts. It is equally important to be as transparent as possible about the concepts, rationales, analyses, methodologies and evaluations of culture being engaged.

Research on cultural innovation and diversification can be very helpful sources of understanding for cultural policy within development. Since people face inevitable trade-offs and conflicts among their different purposes, policy-makers must then consider how these difficulties can be ameliorated through open conversations about cultural processes and values. This is a far more helpful and radical approach to putting culture into development than the approach commonly taken by governments, businesses, and culture-promoting agencies that semi-randomly label some of our activities as 'cultural' and address them piecemeal rather than holistically.

Looking around the world at the various public policies and policy-making institutions pertaining to 'culture', although there is no overall coherent agreement on what cultural policies ought to be about, there is a clear pattern whereby governments use this term in highly restrictive ways. Logically, 'cultural policy' could refer to any aspect of human collective endeavour, but in

practice this term tends to refer narrowly to 'non-vital', residual activities not already covered by other, and in reality equally 'cultural' activities such as health, science, defence, information, industry, and of course agriculture. Education sometimes comes within the remit of cultural policy, but it is probably more common for governments to treat schooling or education separately and to confine cultural policy to the arts and perhaps also sports and leisure.

Because of the strong association of culture with identities and practices associated with certain epistemic cultures, we often find ourselves talking of 'cultures' as if they were discrete local entities. Increasingly, managers of other entities such as schools and workplaces talk of 'the culture' of their organization in order to draw attention to the importance of taken-for-granted beliefs and practices that often evade scrutiny and deliberate transformation. However, culture is better understood not as a discrete entity, but as a way of talking about the fluid knowledge transmission processes that pertain to any kind of social form and development – not just nations and epistemic cultures, but also age groups, businesses, social organizations, schools, religious groups, and activities.

Sub-domains of culture in practice

In practical terms, if we view the sub-domains of culture elaborated earlier, several tangible ideas and examples and policy recommendations come to mind. For instance **socio-cultural participation** might be supported through the promotion and support of meangingful time in development programmes for students and employees to observe and celebrate cultural practices and rites of passage (i.e. participating in marriages, important birthdays and days on the seasonal calendar, celebrated observed by different nations, religions and cultures, etc.). Similarly, governments and organizations might consider support of time and resources for engaging in **driglam/namzha (the way of harmony)** in formal settings such as organizational cultures, community events. For example, cutting edge research organizations recognize creativity, innovation and common sense of culture can be nurtured through the encouragement of informal dress, ergonomic work stations, communal space for socialization and sports, and even bringing pets to work.

Language is closely related to the idea of preserving distinct cultures and identities, and therefore development organizations might consider greater resource support for epistemic cultures that are struggling to maintain their native languages (i.e. through targeted development funding for schools, adult learning, cultural organizations, language exchange programmes and scholarships, publication houses, community activists and organization, training centres, etc.). Respecting and recognizing one's own and other people's

various **identities** is a core feature of the growing call for 'cultural competence', the ability to interact respectfully with people of different cultures, particularly in multi-cultural contexts) in many fields such as the health and care professions (Purnell and Paulanka, 1998/2008; Tseng and Streltzer, 2004; 2008; Dreher, Shapiro and Asselin, 2006), educational evaluation (SenGupta, Hopson and Thompson-Robinson, 2004), international business management (Chhokar, Brodbeck and House, 2007) and international development. **Socio-cultural institutions** such as women's groups play a critical role in positive development in many countries of the South, where they enable savings and credit, collective work and action, increased confidence and cultural coherence, exchange of resources and opportunities for income generation. They are also promote space, support and the wellbeing and happiness of women who often struggle for their rights in difficult circumstances and relations of power that disadvantage them.

One compelling example of ambitious cultural promotion in terms of **artisanal skills** is the 'El Sistema' programme that began with music lessons for a small group of underprivileged children in a garage Venezuela in 1975. The movement's founder, the politician José Antonio Abreu, indicates that the movement is not just about musical excellence for its own sake, but about shared responsibilities for personal life enhancement, social progress, and transcultural empathy (Abreu, 2009). Orchestral and other kinds of musical groups are developed as models for positive social cooperation. Rapidly scaling up through hundreds of local groups, El Sistema became a major national and then international socio-cultural movement, producing some of the world's finest youth orchestras. Nearly 40 years onward, it has directly reached over 3 million children, most of them from social backgrounds that would not otherwise provide them with opportunities for musical participation.

Socially motivated music education is a diverse and crowded market, and El Sistema's accolades have prompted some moderately skeptical questioning of its uniqueness and its value. Some have queried the strong emphasis on Western classical music, largely (though not entirely) to the neglect of other musical genres such as folk and popular music. Others have queried the ethics of high expenditures on orchestral instruments in contexts of economic poverty. Some evaluators have queried the many rather vague and unsubstantiated claims about social and personal transformation (Borchet, 2012). The specific issue of cost has been addressed in Paraguay by a low cost programme that built the 'Landfill Harmonic Orchestra' with instruments made from recycled rubbish and played by children who grew up in a slum on a landfill site (Townsley, 2012). The broader question of the overall contributions of such programmes to happiness has yet to be investigated systematically, but the indications so far are overwhelmingly positive.

Another perhaps more **intangible and residual** area of worth considering is cyberculture, where rapidly growing cultural activities are today engaged. It permeates many aspects of life, and in many countries, a significant portion of people's lives is today spent in cyberspace, even indirectly affecting in many ways the cultural opportunities of those who spend little time online. The development of the internet has radically transformed cultural conservation and creativity across the world (Souter, 2010; Goriunova, 2012), and cultural policy analysis must continue to assess the opportunities and threats of these rapid developments. Its influences on cultural vitality and happiness have been the subject of numerous research projects and popular assessments. Social networking is not only the subject of research, it also offers important new approaches to conducting socio-cultural research. Online collaboration and crowdsourcing are breaking down divisions between researchers and researched, and between producers and consumers of culture.

These developments are not always celebrated, and there are important generational, personal, gendered and geopolitical differences in the evaluation of cyberculture (Amichai-Hamburger and Barak, 2009). In some countries, the internet is absent from 'cultural policy' discourse or is addressed as a set of threats rather than opportunities (Dayton-Johnson, 2002). For instance, research on new popular cybercultural innovations such as online fantasy gaming demonstrates its cognitive and emotional benefits (Johnson, 2011), and future research might investigate how it can be carefully used as a development application. Many global reviews have noted the potential of the internet for promoting cultural revitalization, linguistic diversity, and intercultural competence (Danet and Herring, 2007; Ishida, 2010). Of note, the internet has been embraced enthusiastically by the government and people of Bhutan and shows good potential to play key roles in GNH policy (Kezang and Whalley, 2009; Heek, 2012).

Explicit happiness promotion has become one of the more prominent functions of cyberculture. Although much of this is done in a superficially individualist 'self-help' way, many activities promote offline social bonding and cultural engagement. Cultural practices are also transformed with cyberculture. For instance, in India, arranged marriages traditionally organized by relatives are facilitated by internet dating sites that systematically calculate social and astrological compatibility. In a study of happiness seekers following online self-help guidance, over half reported 'nurturing my social relationships' as the most important consequent activity; 77% reported acts of kindness to others as a consequent activity, 66% reported increased sports, and 41% reported increased religious or spiritual engagements (Parks et al., 2012, pp.1227-8). These researchers also found significant positive correlations between self-reported

happiness improvements and engagement in a variety of online-prompted self-help activities. Other research shows that even when happiness is not the direct and explicit objective of cybercultural innovation, social networking and blogging can have demonstrable and significant benefits for self-esteem, self-reported happiness, and social wellbeing (Valkenburg, 2006; Peter and Schouten, 2006; Ko and Kuo, 2009; Burke, Marlow and Lento, 2010).

Conclusion: The central role of culture in the new development paradigm

Culture, like happiness, is recognized as elusive by some – based on the argument that it is barely if at all within the reach of deliberate policy manipulation. Further it is posited, if happiness is rarely an explicit policy goal, this is doubtless largely due to the belief that whatever influences policies may have on happiness, they are very indirect and mediated through a multiplicity of personal, social, and environmental factors that aren't directly submissive to practical control. As we tried to capture in the new additional sub-domain suggested earlier of "residual, intangible and misunderstood" the cultural dimensions of these processes are particularly elusive and hard to study and describe, and difficult to deliberately manipulate due to reasons such as emotional attachment, deeply held beliefs, etc. In this sense, it is important to document not only what is intended and formally recognized within our interventions, but also what is often hidden, unintended, and take for granted cultural processes, and be transparent about who is constructing the definitions.

The vital importance of culture has often been undervalued, downplayed and marginalized in dominant development approaches and organizations. However, GNH and the new happiness based development paradigm, recognizing the pitfalls and shortcomings of previous development paradigms, gives culture equal value with other domains, including psychological wellbeing, community vitality, time use, ecological diversity and resilience, education, health, good governance, and living standards (Ura, 2012). This in itself is a valuable innovation that will better nuance and improve development efforts in the future, as long as it done with evaluative scrutiny, transparency, reflexivity, while giving equal weight to trans-disciplinary and different world perspectives. Here, what are normally considered technical fields such as science, engineering, economics, etc. must be on equal footing with culture, spirituality, society, environment and indigenous perspectives.

GNH and a new happiness based development paradigm have important global potential to the wider world, especially in the heels of the recent global financial meltdown compounded by energy and food crises. They bring invaluable insights about enhancing the quality of people's wellbeing and happiness at a critical time when the world begins to negotiate sustainable development goals. Bhutan's unique multi-disciplinary and holistic approach in which culture plays

a critical role, provides the world an important alternative to narrow, positivist and economically-driven paradigms that have dominated much of development for more than 60 years. Built on assumptions of modernity as the backbone of development, it is not clear that the whole planet consuming at 'first world' levels is viable or desirable (Ferguson, 1999; 1994; Peet and Watts, 1996; Escobar, 1996; 1995; Gardner and Lewis, 1996; Crush, 1995). Nor is the solution a Western "colonizing monoculture" that bulldozes over diverse local modes of life (Watts, 1995) and its place privileges one set of powerfully dominant cultural values, ideals, interventions and discourses over other ones (Verma, 2009). Recent crises have not only demonstrated their shortcomings, but also indicated that they are no longer viable for improving the wellbeing and happiness of the planet.

It is also worth keeping in mind that in a rapidly changing world, urgent research is needed to document and understand the way multiple drivers of change are impacting women's and men's ability to remain happy and not only maintain but improve their wellbeing within shifting circumstances and changing identities. Valuable cultural practices, languages, spiritual beliefs that are also scientifically and environmentally sound, indigenous peoples, ways of life and connectedness that contribute to wellbeing and happiness are being lost at the cross-currents of such rapid change. What the GNH and happiness based development paradigm can do is give due attention to these losses as well as value positive aspects of culture. It provides for the analysis and promotion of wellbeing, towards an improvement in happiness and quality of life. Here, the key word is betterment – not just ensuring that people are merely adapting to change or barely improving lives based on drudgery, but their lives are being transformed in ways that improve their happiness and wellbeing in ways that are positive.

At a time when the world ponders how to deal with economic recessions, persistent suffering, economic poverty, hunger, inequality and environment destruction, Bhutan's invaluable contribution to humanity is its GNH approach (Hoellerer, 2010). Culture, anthropology, cultural psychology and ethnography are all well-aligned with the central tenets of GNH, based on Bhutan's experience and thinking in this area. One only has to visit Bhutan to see that both culture and environment are protected and promoted in critical ways that preserve positive aspects of its heritage, and that the country takes very seriously and with humility the happiness of its people. In this moment of history, we have a unique opportunity to share with the world a holistic approach towards development, a new happiness development paradigm based firmly in the GNH approach that values culture, which can play a pivotal role not in the conceptualization of the SDGs but also improving the wellbeing and happiness of humanity.

References

Abreu, J. A., 2009. The El Sistema music revolution. www.ted.com/talks/jose_abreu_on_kids_transformed_by_music.htl

Abu-Loghod, L., 1993. *Writing women's worlds: Bedouin stories*. Berkeley and Los Angeles: University of California Press.

Abwunza, J., 1997. *Women's Voices, Women's Power: dialogues of resistance from East Africa*. Peterborough: Broadview Press.

Amichai-Hamburger, Y., and Barak, A., 2009. Internet and wellbeing. In: Y. Amichai-Hamburger, ed. *Technology and Psychological Wellbeing*. Cambridge: Cambridge University Press, 34-76

Ang, S. and Van Dyne, L. eds., 2008. *Handbook of Cultural Intelligence: theory measurement and application*. M.E. Sharpe.

Bagozzi, R. P., Wong, N. and Yi, Y. 1999. The role of culture and gender in the relationship between positive and negative affect. *Cognition and Emotion,* 13, 641–672.

Barrett, C., 2008. *A Normative Framework for Social Science Activities in the CGIAR.* Cornell University.

Barrett, C., Agrawal, A., Coomes, O. and Platteau, J. P., 2009. *Stripe Review of Social Sciences in the CGIAR*. Social Science Secretariat.

Baumeister, R. F., 1986. *Identity: cultural change and the struggle for self.* New York: Oxford University Press.

_____ 2005. *The cultural animal: human nature, meaning, and social life.* Oxford: Oxford University Press.

Borchet, G., 2012. El Sistema: a subjectivity of time discipline. In: A. Araújo and E. Duque, eds. *Os tempos sociais e o mundo contemporâneo*. Universidade do Minho: Centro de Estudos de Comunicação e Sociedade, 59-79.

Boyd, R. and Richerson, P. J., 2005. *The origin and evolution of cultures.* Oxford: Oxford University Press

Burke, M., Marlow, C. and Lento, T., 2010. Social network activity and social wellbeing. *Human-Computer Interaction,* April 10–15

Cernea, M. M. and Kassam, A.H. eds., 2006. *Researching the culture in agriculture: social research for international development*. Wallingford, U.K.: CABI Publishing.

Cernea, M. M., 2005. Studying the culture of agriculture: an uphill battle for social research in the CGIAR. *Culture and Agriculture* 27(2), 73-87.

Chhokar, J. S., Brodbeck, F. C. and House, R. J., 2007. *Culture and leadership across the world: The GLOBE Book of In-Depth Studies of 25 Societies.* New York: Lawrence Erlbaum.

Chouguley, U., Naylor, R. and Rosemberg-Montes, C., 2011. *Edinburgh Festivals Impact Study. Final Report.* London: BOP Consulting, May.

Cronk, Lee., 1999. *That complex whole: culture and the evolution of human behavior.* Boulder, CO: Westview Press.

Crush, J., 1995. Introduction: imagining development. In: J. Crush, ed. *The Power of Development*. London and New York: Routledge, 1-23.

Dallmayr, F. R., 2010. *Integral pluralism: beyond culture wars*. Lexington, KN: University Press of Kentucky

Danet, B. and Herring, S. C. eds., 2007. *The multilingual internet: language, culture, and communication online.* Oxford: Oxford University Press

Dayton-Johnson, J., 2002. The economics of cultural policy in the internet age. *Canadian Journal of Communication,* 27(4).

Diener, E. and Diener, M., 1995. Cross-cultural correlates of life satisfaction and self-esteem. *Journal of Personality and Social Psychology*, 68, 653–663.

Diener, E., Diener, M. and Diener, C., 1995. Factors predicting the subjective wellbeing of nations. *Journal of Personality and Social Psychology* 69, 851–864.

Dreher, M. C., Shapiro, D. and Asselin, M., 2006. *Healthy places, healthy people: a handbook for culturally competent community nursing pPractice*. Indianapolis, In Sigma Theta Tau International.

Escobar, A., 1995. *Encountering development: the making and unmaking of the third world*. Princeton: Princeton University Press.

_____ 1996. Constructing Nature: elements of poststructuralist political ecology. In: R. Peet and M. Watts, eds. *Liberation Ecologies: Environment, Development and Social Movements*. London and New York: Routledge, 46-68.

Evans-Pritchard, E. E., 1940. *The Nuer*. Oxford: Clarendon Press.

Fairhead, J. and Leach, M., 1993. Degrading people? The misuse of history in Guinea's environmental policy. Paper presented at the *African Studies Association Meeting*: Boston.

Fairhead, J. and Leach, M., 1995. False forest history, complicit social analysis: rethinking some western African environmental narratives. *World Development,* 23(6), 1023-1035.

_____ 1996. *Misreading the African Landscape*. Cambridge: Cambridge University Press.

Fechter, A. M. and Hindman, H. eds., 2011. *Inside the everyday lives of development workers: the challenges and futures of Aidland*. Sterling VA: Kumarian Press.

Ferguson, J., 1994. *The anti-politics machine: "development", depoliticization, and bureaucratic power in Lesotho*. Minneapolis: University of Minnesota Press.

_____ 1999. *Expectations of modernity: myths and meanings of urban life on the Zambian copperbelt*. University of California Press: Los Angeles.

Foucault, M., 1972. *Archeology of knowledge*, New York: Pantheon.

Fulmer, A. C., Gelfand, M. J., Kruglanski, A. W., Kim-Prieto, C., Diener, E., Pierro, A. and Higgins, E. T., 2010. On "feeling right" in cultural contexts:

how person-culture match affects self-esteem and subjective wellbeing. *Psychological Science* 21(11), 1563–1569.

Gardner, K. and Lewis, D., 1996. *Anthropology, development and the post-modern challenge*. London and Chicago: Pluto Press.

Gibson, K. R., 2002. Customs and cultures in animals and humans: neurobiological and evolutionary considerations. *Anthropological Theory*, 2(3), 323-339.

Ginsburgh, V. A. and Throsby, D., 2006. *Handbook of the economics of art and culture.* Amsterdam: Elsevier.

Goriunova, O., 2012. *Art platforms and cultural production on the internet*. London: Routledge

Gupta, A. and Ferguson, J., 1997a. Culture, power, place: ethnography at the end of an Era. In: A. Gupta and J. Ferguson, eds. *Culture, power, place: explorations in critical anthropology*. Duke University Press: Durham, North Carolina, 1-29.

_____ 1997b. Discipline and practice: "The Field" as site, method and location in anthropology. In: A. Gupta and J. Ferguson, eds. *Anthropological locations: boundaries and grounds of a field science*. University of California Press: Berkeley and Los Angeles, 1-46.

Harris, S., 2010. *The moral landscape: how science can determine human values*. New York: Free Press.

Hawkes, J., 2001. *4th Pillar of sustainability: culture's essential role in public planning.* Victoria, Australia: Common Ground Publishing, with the Cultural Development Network. www.culturaldevelopment.net.au

Heeks, R., 2012. Technology and Gross National Happiness: connecting digital technologies and happiness. *Communications of the ACM* , 55(4), 24-26

Henrich, J. and Henrich, N., 2007. *Why humans cooperate: a cultural and evolutionary explanation.* Oxford: Oxford University Press.

Hodder, I., 2010. Cultural heritage rights: from ownership and descent to justice and wellbeing. *Anthropological Quarterly,* 83(4), 861-882.

Hoellerer, N. I. J., 2010. The use of qualitative and ethnographic research to enhance the measurement and operationalisation of Gross National Happiness. *Journal of Bhutan Studies* 23, 26-54.

Ishida, T. ed., 2010. *Culture and computing: computing and communication for crosscultural interaction.* Berlin: Springer

James, D., Plaice, E. and Toren, C. eds., 2010. *Culture wars: context, models and anthropologists' accounts*. Oxford: Berghahn

Ji, L. J., Nisbett, R. E. and Su, Y., 2001. Culture, change, and prediction. *Psychological Science,* 12, 450-456.

Johnson, M. T., 2011. Towards the development of objective, universal criteria of cultural evaluation: the challenges posed by anti-foundationalism, culturalism and romanticism. *Social Indicators Research,* 102, 275-29.

Johnson, S., 2005. *Everything bad is good for you: how today's popular culture is actually making us smarter.* New York: Riverhead

Kezang, K. and Whalley, J., 2009. Do information and communication technologies further or hinder Gross National Happiness? In: *Gross National Happiness: practice and measurement: the proceedings of the Fourth International Conference on Gross National Happiness.* Thimphu: Centre for Bhutan Studies, 369-391

Kim, S. and Kim, H., 2009. Does cultural capital matter?: Cultural divide and quality of life. *Social Indicators Research* 93(2), 295-313.

Kitayama, S. and Markus, H. R., 2000. The pursuit of happiness and the realization of sympathy: cultural patterns of self, social relations, and wellbeing. In: E. Diener and E. M. Suh, eds. *Cultural and subjective wellbeing.* Cambridge, MA: The MIT Press, 113–161.

Kitayama, S., Markus, H.R. and Kurokawa, M., 2000. Culture, emotion, and wellbeing: Good feelings in Japan and the United States. *Cognition and Emotion,* 14, 93–124.

Kitayama, S., Mesquita, B. and Karasawa, M., 2006. Cultural affordance and emotional experience: socially engaging and disengaging emotions in Japan and the United States. *Journal of Personality and Social Psychology*, 91, 890–903.

Kitayama, S., Park, H., Sevincer, A. T., Karasawa, M. and Uskul, A. K., 2009. A cultural task analysis of implicit independence: comparing North America, Western Europe, and East Asia. *Journal of Personality and Social Psychology,* 97, 236-255.

Knorr-Cetina, K., 1981. *The manufacture of knowledge: an essay on the constructivist and contextual nature of science.* Oxford: Pergamon Press.

Ko, H.C. and Kuo, F.Y., 2009. Can blogging enhance subjective wellbeing through self-disclosure? *Cyberpsychology & behavior,* 12(1), 75-9.

Lansing, S., 1987. Balinese "Water Temples" and the management of irrigation. *American Anthropologist,* 89(2), 326-341.

Latour, B. and Woolgar, S., 1979. *Laboratory life: the social construction of scientific facts*. Princeton: Princeton University Press.

Li, T. M., 1996. Images of community: discourse and strategy in property relations. D*evelopment an*d *Change,* 27(3), 501-527

_____ 2007. *The will to improve: governmentality, development, and the practice of politics*. Durham and London: Duke University Press.

Lu, L., 2006. "Cultural fit": individual and societal discrepancies in values, beliefs, and subjective wellbeing. *Journal of Social Psychology,* 146(2), 203–221.

Mackenzie, F., 1995. "*A farm is like a child who cannot be left unguarded*": *gender, land and labour in Central Province, Kenya. IDS Bulletin*, *26*(1), 17-23.

_____ 2010. Gender, land tenure and globalisation: exploring the conceptual ground. In: D. Tsikata and P. Golah, eds. *Land Tenure, Gender and Globalization: Research and Analysis from Africa, Asia and Latin America*. Ottawa: Ottawa, 35-69.

Malinowski, B., 1939. The group and the individual in functional analysis. *American Journal of Sociology*, 44(6), 938-47.

McGuigan, J., 2004. *Rethinking cultural policy.* Maidenhead, UK: Open University Press.

Meredyth, D. and Minson, J., 2001. *Citizenship and cultural policy.* London: Sage.

Misiko, M., 2010. "Opting Out": a case study of smallholder rejection of research in Western Kenya. In: L. German, R. Verma and J. Ramisch, eds. *Beyond the bio-physical: knowledge, culture and politics in natural resource management*. New York: Springer, 129-148.

Moore, D., 1993. Contesting terrain in Zimbabwe's Eastern Highlands: political ecology, ethnography and peasant resource struggles. *Economic Geography,* 69, 380-401.

Moore, H. and Sanders, T., 2006. Anthropology and epistemology. In: H. Moore and T. Sanders, eds. *Anthropology in theory: issues in epistemology*. Oxford: Blackwell Publishers, 1-21.

Mosse, D. ed., 2011. *Adventures in Aidland: the anthropology of professionals in international development*. New York and Oxford: Berghahn Press.

Mosse, D., 2005. *Cultivating development: an ethnography of aid policy and practice*. Pluto Press: London and Ann Arbor.

Nisbett, R. E., 2003. *The geography of thought: how Asians and Westerners think differently…and why*. New York: Free Press.

Owen-Vandersluis, S., 2003. *Ethics and cultural policy in a global economy.* Houndmills, UK: Palgrave Macmillan.

Parks, A. C., Della Porta, M. D., Pierce, R. S., Zilca, R. and Lyubomirsky, S., 2012. Pursuing happiness in everyday life: the characteristics and behaviors of online happiness seekers. *Emotion,* 12(6), 1222–1234

Peet, R. and Watts, M. 1996. Liberation ecology: development, sustainability, and environment in an age of market triumphalism. In: R. Peet and M. Watts, eds. *Liberation ecologies: environment, development and social movements*. London and New York: Routledge, 1-45.

Phillips, R. and Shockley, G., 2010. Linking cultural capital conceptions to asset-based community development. In: G. P. Green and A. Goetting, eds. *Mobilizing Communities: Asset Building as a Community Development Strategy*. Philadelphia PA: Temple University Press, 92-111

Purnell, L. D. and Paulanka, B. J. eds. 1998/2008. *Transcultural health care: a culturally competent approach.* 3rd edn Philadelphia, PA: F. A. Davis.

Putnam, R. J., 2000. *Bowling alone: the collapse and revival of American community*. New York: Simon & Schuster.

Radcliffe-Brown, A. A., 1952. *Structure and function in primitive society*, London: Cohen and West Ltd.

Ratzlaff, C., Matsumoto, D., Kouznetsova, N., Raroque, J. and Ray, R., 2000. Individual psychological culture and subjective wellbeing. In: E. Diener and E. M. Suh, eds. *Culture and subjective wellbeing.* Cambridge, MA: MIT Press, 37-60.

Reyes-García, V., Gravlee, C. C., McDade, T. W., Huanca, T., Leonard, W. R. and Tanner, S., 2010. Cultural consonance and psychological wellbeing: estimates using longitudinal data from an Amazonian society. *Culture, Medicine, Psychiatry*, 34, 186-203.

Richards, P., 1993. Cultivation: knowledge or performance? In: M. Hobart, ed. *An anthropological critique of development: the growth of ignorance*. London and New York: Routledge, 61-78.

_____ 1994. Local knowledge formation and validation: the case of rice production in Central Sierra Leon*e*. In: I. Scoones and J. Thompson, eds. *Beyond farmer first: rural people's knowledge, agricultural research and extension practice*. London: Intermediate Technology Publications, 165-170.

Richerson, P. J. and Boyd, R., 2006. *Not by genes alone: how culture transformed human evolution.* Chicago: University Of Chicago Press.

Roe, E. M., 1991. Development narratives, or making the best of blueprint development. *World Development*, 19(4), 287-300.

Scott, J., 1985. *Weapons of the weak and everyday forms of peasant resistance*. New Haven and London: Yale University Press.

_____ 1990. *Domination and the arts of resistance: hidden transcripts*. New Haven and London: Yale University Press.

Sen Gupta, S., Hopson, R. and Thompson-Robinson, M., 2004. Cultural competence in evaluation: an overview. *New Directions for Evaluation*, 102, 5-19.

Sikana, P., 2010. Who is fooling whom? Participation, power and interest in rural development. In: L. German, R. Verma and J. Ramisch, eds. *Beyond the bio-physical: knowledge, culture and politics in natural resource management*. New York: Springer.

Souter, D., 2010. *Towards inclusive knowledge societies: a review of UNESCO's action in implementing the WSIS outcomes.* Paris: UNESCO

Thin, N., 2002. *Social progress and sustainable development.* London: IT Publications.

_____ 2012. Ethnocentrism. In: A. Michalos, ed. *Springer Encyclopedia of quality of life research*. Dordrecht: Springer http://referencelive.springer.com/qure

Tomasello, M., 1999. *The cultural origins of human cognition.* Cambridge, MA: MIT Press.

Townsley, G. [Director]. 2012. Documentary Video: 'Landfill Harmonic- The world sends us garbage... We send back music.' http://vimeo.com/52711779

Towse, R., 2010. *A textbook of cultural economics.* Cambridge: Cambridge University Press.

Tseng, W. S. and Streltzer, J. eds. 2004. *Cultural competence in clinical psychiatry.* American Psychiatric Association.

_____ 2008. *Cultural competence in health care.* Dordrecht: Springer.

Uchida, Y. and Kitayama, S., 2009. Happiness and unhappiness in east and west: themes and variations. *Emotion,* 9, 441–456.

Uchida, Y. and Ogihara, Y., 2012. Personal or interpersonal construal of happiness: a cultural psychological perspective. *International Journal of Wellbeing,* 2, 354-369.

UNDP, 2004. *Human development report 2004: cultural liberty in today's diverse world.* New York: UNDP.

UNESCO, 2009. *UNESCO world report: investing in cultural diversity and intercultural dialogue.* Paris: UNESCO.

_____ 2011. *A new cultural policy agenda for development and mutual understanding: key arguments for a strong commitment to cultural diversity and intercultural dialogue.* Paris: UNESCO.

United Cities and Local Governments (UCLG). Culture: fourth pillar of sustainable development. http://agenda21culture.net/

United Nations General Assembly, 2013. *Happiness: towards a holistic approach to development: Note by the Secretary-General*, A/67/697, New York: United Nations.

Ura, K., 2007. Culture, liberty, and happiness. In: *Media and Public Culture*. Thimphu: Centre for Bhutan Studies www.bhutanstudies.org.bt/pubFiles/M-5.pdf

Ura, K., Alkire, S., Zangmo, T. and Wangdi, K., 2012a. *A short guide to Gross National Happiness Index*, Thimphu: Centre for Bhutan Studies.

_____ 2012b. *An extensive analysis of GNH index*, Thimphu: Centre for Bhutan Studies.

Usborne, E. and Taylor, D. M., 2010. The role of cultural identity clarity for self-concept clarity, self-esteem, and subjective wellbeing. *Personality and Social Psychology Bulletin,* 36, 883–897.

Valkenburg, P. M., Peter, J. and Schouten, A. P., 2006. Friend networking sites and their relationship to adolescents' wellbeing and social self-esteem. *Cyberpsychology & Behavior,* 9(5), 584-590

Verma, R., 2001. *Gender, land and livelihoods: through farmers eyes*. Ottawa: IDRC.

_____ 2008. At work and at play in the 'Fish Bowl': gender relations and social reproduction among development expatriates in Madagascar. In: A. Coles and A. M. Fechter, eds. *Gender and family among transnational professionals.* Routledge: London and New York, 171-192.

_____ 2009. *Culture, power and development disconnect in the Central Highlands of Madagascar*. Unpublished Ph.D., London: School of Oriental and African Studies.

_____ 2011. Intercultural encounters, colonial continuities and contemporary disconnects: an ethnography of development practitioners in Madagascar. In: A. M. Fechter and H. Hindman, eds. *Inside the everyday lives of development workers: the challenges and futures of Aidland*. Sterling VA: Kumarian Press, 59-82.

_____ 2013. (forthcoming) Land grabs in East and Southern Africa, so what's 'New'? historical continuities, power disconnects and gender dispossessions. *Feminist Economics: Special Issue on Gender, Land and Food Security,* 19(3).

Verma, R., German, L. and Ramisch, J., 2010. Agriculture, natural resource management and Development. In: L. German, R. Verma and J. Ramisch, eds. *Beyond the bio-physical: knowledge, culture and politics in natural resource management*. New York: Springer, 1-24.

Verma, R., Russell, D. and German, L., 2010. Anthro-apology? The clash between inter-disciplinary collaboration and in-depth socio-cultural research in the CGIAR. In: L. German, R. Verma and J. Ramisch, eds. *Beyond the bio-physical: knowledge, culture and politics in natural resource management*. New York: Springer, 257-282.

Walmsley, B., 2012. Towards a balanced scorecard: a critical analysis of the culture and sport evidence (CASE) programme. *Cultural Trends,* 21(4), 325-334

Watts, M., 1995. A new deal in emotions: theory and practice and the crisis of development. In: J Crush, ed. *Power of development*. London and New York: Routledge, 44-62.

Weisner, T. S., 2010. Wellbeing, chaos, and culture: sustaining a meaningful daily routine. In: G. W. Evans and T. Wachs, eds. *Chaos and its influence on children's development: an ecological perspective.* Washington, DC: American Psychological Association, 211-224.

Weiss, G., 1973. A scientific concept of culture. *American Anthropologist,* 75(5), 1382.

Whitehead, A. and Tsikata, D., 2003. Policy discourses on women's land rights in Sub-Saharan Africa: the implications of the re-turn to the customary. *Journal of Agrarian Change* 3(1), 67-112.

Wirtz, D., Chiu, C., Diener, E. and Oishi, S., 2009. What constitutes a good life? Cultural differences in the role of positive and negative affect in subjective wellbeing. *Journal of Personality* , 77(4), 1168-1195

Chapter 13: Time Use and Balance

— Robert Levine, Ilona Boniwell, Evgeny Osin and John de Graaf

Domain description

Introduction

Time is our most valuable resource. The way we behave and think about the past, present and future, our very conception of time, effects virtually every aspect of our lives - our relationships, careers, successes and failures, the decisions we make, the emotions we feel and, in the end, the very essence of our life experience. Research has also demonstrated the profundity with which our temporal beliefs and behaviors are interrelated with the world around us--in our culture, geography, climate, religion, social class, educational level and the political and economic stability of our surroundings (e.g. Zimbardo and Boyd, 2008; Levine, 1997).

At the April 2, 2012 UN meeting Bhutan's Prime Minister Jigmi Thinley called for "a new world economic system" of sustainable wellbeing, which, among other features, "gives us time to live and enjoy our lives and to appreciate rather than destroy our world." "Time use and balance" have been designated as one of the nine core domains of Bhutan's index of Gross National Happiness (GNH). This chapter reviews major findings concerning time use, its relationship to wellbeing and how these findings may inform policymaking.

Historic trends

Balanced time use begins with the issue of work hours. Working hours have varied greatly throughout history (Whaples, 2001). Medieval peasants worked seasonally, with long hours in summer and short ones in winter. They celebrated many Saints' days, leading to annual working hours similar to those in Western Europe today. In peasant societies, long hours were, and are, often interrupted by weather and the pace of work is less rushed.

The Industrial Revolution led to a near-doubling of annual working hours. Long work hours are associated with the early stages of industrialization in many countries. Through a series of struggles, labor and political organizations succeeded in greatly reducing working hours in industrialized countries during the period from approximately 1850 to 1950. The widely celebrated "May Day" began as a series of demonstrations for the eight-hour day.

The 40-hour work week, two-day weekends and limited vacation time became the standard in wealthy countries and many others after World War II. In

Europe and in a number of countries outside Europe, at least four weeks of vacation time is now standard. By contrast, the norm is two weeks in Korea, Japan and the United States (which actually has no vacation law at all—30 percent of US workers get no paid vacation time). Nor does the 40-hour mandate, or any work-week regulations at all, apply to workers in the 'informal economy' in many countries.

Time balance is now also affected by changes outside of working hours. Electronic devices and new advances in computer technologies keep many workers "leashed to the office" even during non-working hours. Long commutes add to time stresses, as does the vast amount of consumer choice in modern economies. Moreover, passive leisure, especially TV watching and internet surfing, now consumes greater segments of the day. Ironically, long working hours, as in the US, Japan and Korea, often lead to more TV viewing, as watching television is a passive activity perfectly suited to those who return home exhausted from work. In many countries where work hours are shorter, more time is given to socializing with friends and family or to active leisure. These trends are, of course, highly dependent on culture and other local factors. Current, post-recession, annual working hours in industrialized countries range from less than 1400 in Norway, the Netherlands and Germany to nearly 1800 in the United States and 2000 in Korea and the Czech Republic.

The issue of maximum work hours has been recognized for some time. In fact, the eight-hour day, often implying a 48-hour week, has been a key demand of labor groups representing the working class even before the establishment of the International Labour Organization (ILO) in 1919 (Alcock, 1971). The ILO has long held this demand high on its agenda. Lee, McCann and Messenger (2007) observe: "To the workers, the extension and generalized application of the eight-hour day represented a reform which no other could equal in value – a chance to share in the distribution of the new wealth created by modern industry and to receive that share in the form of spare time. More generally, the need to safeguard the health and wellbeing of workers was recognized; overlong hours had been shown to be harmful to economic efficiency as well as to material and moral welfare of the workers and to be incompatible with political democracy. Finally, there was a feeling in many quarters that international standards relating to hours of work might be a useful means of limiting the possibilities of unfair competition. In reflection of this trend of world opinion, the adoption of the eight-hour day and 48-hour week was a prime objective of the ILO (p.1)."

The quality of people's time goes beyond objective work hours, however. There are many sub-categories of time use. Even more importantly, the quality of one's time is reflected in subjective perceptions as much as it is in objective

categories. Unsatisfying time quality is present when people feel constantly rushed, feel a lack of time to enjoy activities and share them with others, and experience their work as uncreative drudgery. The notion of 'time balance' attempts to incorporate these and other issues. A new economic paradigm based on sustainable wellbeing or happiness would reassess the relative valuation of work and leisure now prevalent in calculations of GDP and give greater value to the importance of leisure or free time. (See, e.g., Moss and Deven, 1999; Clark, Harvey and Shawn, 1990; Boniwell, 2009).

Existing sub-domains

The two main sub-domains of time use in Bhutan's GNH index are work hours and sleep hours. This derives from the assumption that time poverty eminates from lives that are overly-controlled by paid and unpaid work and a resultant lack of sleep. There are many sub-categories within these classifications, however. Generally, time researchers have divided the day into a range of activities, some of which overlap with others and are not neatly defined. For example, meal preparation might be seen as domestic work—a chore—or, in other situations, as active leisure. Some of the typically measured categories of time use include (e.g. Robinson and Godbey, 1997):

A. Paid employment
B. Unpaid domestic or volunteer work
C. Self-care—meals, grooming, prayer, meditation, etc.
D. Socializing with family or friends
E. Active leisure—exercise, athletics, reading, lifelong education, theater, art, music,
F. Passive leisure—watching TV or films, sitting on the beach, etc.
G. Shopping
H. Rest
I. Sleep

A balanced life, leading to greater wellbeing, can be seen as one which pays attention to each of these activities and, depending on the individual, culture and situation, combines them optimally.

Additional temporal issues to be considered in time use policies

There are a number of time-related issues beyond those concerning the pure number of work and leisure hours that should be considered when formulating policies. Many of these show considerable variation across cultures and a proper understanding of the value a culture attaches to these issues is essential when formulating policies. In addition, many of these are critical to understanding the subjective perception of actual time use. Some temporal

characteristics that are especially pertinent to the perception of optimal balance include:

Temporal perspective

Time perspective is one of the most powerful influences affecting almost all aspects of human behaviour, such as delinquency, educational achievement, health, sleep and dreaming patterns, and choices of romantic partner, thus affecting our quality of life (Boniwell and Zimbardo, 2003). Data suggests that individuals have tendencies to be either more past, present or future oriented. However, as there are problems associated with an excessive orientation towards any one perspective, a balanced time perspective has been proposed as the ideal mode of functioning. Individuals with a balanced time perspective have been shown to be happier on both hedonic and eudaimonic indicators, suggesting that learning to achieve a balanced time perspective may be one of the keys to unlocking personal happiness (Boniwell et al., 2010).

Work-leisure balance

It is important to recognize that there are cultural differences in the value placed on work, on leisure, and on the balance between the two.   Although some balance is universal, the preferred formulas differ both across cultures and between individuals in each culture. The differences are marked even within highly industrialized countries, The U.S. and Japan are famous for long work hours, as exemplified by the terms "workaholic" and "karoshi" (Levine, 1997). European nations tend to also emphasize hard work, with many differences between countries, but generally put greater emphasis on preserving non-work time than do people in the U.S. and Japan. Policies pertaining to work hours must take into account each culture's belief as to the appropriate balance between work and leisure.

Ask versus social time

Time spent within the work place also varies across cultures. People tend to spend more of their work time on-task in some cultures and more on socializing—informal chatting, having tea or coffee with colleagues, etc.—in other cultures. Studies have found wide cultural variation in answers to the question: "In the companies for which you have worked, what per cent of time do people typically spend on tasks that are part of their job description." For example, people working in companies in large cities in the United States tend to report in the range of "80 per cent task time, 20 per cent social time." On the other hand, people working in companies in India, Nepal, Indonesia, Malaysia, and some Latin American countries tend to give answers closer to "50 per cent task time, 50 per cent social time" (Brislin and Kim, 2003).

Clock and event time

One of the most significant differences in timekeeping throughout history has been between people operating by the clock and those who measure time by social events (Lauer, 1981). This profound difference in thinking about time continues to divide cultures today. Under clock time, the hour on the timepiece governs the beginning and ending of activities. Under event time, scheduling is determined by the flow of the activity. Events begin and end when, by mutual consensus, participants "feel" the time is right (Levine, 1997). Many countries exhort event time as a philosophy of life. In East Africa, there is a popular adage that "Even the time takes its time." In Trinidad, it is commonly said that "Any time is Trinidad time." In the United States and much of Europe, by contrast, the right way to measure time is assumed to be by the clock. This is especially true when it comes to the work hours. Time is money and any time not focused on-task is seen as wasted time.

There is nothing inherently superior about either clock or event time-keeping. Each have distinctive strengths and weaknesses and each, or a blend of the two, can be more functional depending on the nature of the task, the characteristics of the individuals involved and the predominant norms and values of a culture.

Polychronic and monochronic time

Industrial/organizational psychologists emphasize the significance of monochronic versus polychronic work patterns (Bluedorn, 2002). People and organizations in clock time cultures are more likely to emphasize monochronic (M-time) approaches, meaning they like to focus on one activity at a time. People in event time cultures, on the other hand, tend to emphasize polychronic (P-time) approaches, meaning they prefer to do several things at once (These labels were originally develop by Hall (1983)). M-time people like to work from start to finish in linear sequence: the first task is begun and completed before turning to another, which is then begun and completed. In polychronic time, however, one project goes on until there is an inclination or inspiration to turn to another, which may lead to an idea for another, then back to first, with intermittent and unpredictable pauses and re-assumptions of one task or another.

P-time goes beyond what is popularly known as "multi-tasking." P-time cultures emphasize the completion of human transactions rather than keeping to schedules. For example, two P-time individuals who are deep in conversation will typically choose to arrive late for their next appointment rather than cut into the flow of their discussion. Both would be insulted, in fact, if their partner were to abruptly terminate the conversation before it came to a spontaneous conclusion. Policies must be sensitive to these differences.

Silence and "doing nothing"

In some cultures, notably the USA and Western Europe, silence makes people uncomfortable. It may denote nothing is happening or that something is going wrong. The usual response is to say something, to fill the silence or to keep the meeting or conversation going. People in other cultures, including many Asian and Pacific Island nations, are quite comfortable with silence. It may be seen as an opportunity to focus inward and gather one's thoughts before speaking. The Japanese emphasize "ma," which roughly translates as the "space" between things, or the "pause." It implies that what happens between things, or what doesn't seem to be happening, is as or more important than what is visibly happening. As an extreme example, people in Brunei often begin their day by asking: "What isn't going to happen today?"

Brislin (2000) has described how cultural misunderstandings and counterproductive decisions often arise from these differences. For example, "Americans will sometimes misinterpret long periods of silence as a signal that they should make a concession. Their negotiating counterparts in Asia know this and will sometimes prolong their silence in the expectation that a concession will be made." These differences may appear both within and outside the workday.

Wasted time

A related temporal difference concerns what people perceive as "wasted time." People, cultures, and economies that emphasize the rule that "time is money" may see any time not devoted to tangible production as wasted time. People in other cultures, however, believe that overemphasis on this rule is a waste of one's time in a larger sense, i.e. it is a wasteful way to spend the time of one's life. If something more worthy of one's attention—be it social- or work-related-- challenges a planned schedule, it is seen as wasteful to not deviate from the planned schedule. More accurately, the term "wasted time" may make little sense. A typical comment may be, "There is no such thing as wasted time. If you are not doing one thing, you are doing something else" (Levine, 1997, p.91).

Norms concerning waiting

Cultures differ in their norms for waiting, not only how long it is appropriate to keep a person waiting but how the rules change depending on the situation and the people involved. Levine (1997) describes a number of "rules" to waiting and how these rules differ in various cultures. Some useful questions: Are the rules based on the principal that time is money? Who is expected to wait for whom, under what circumstances and for how long? Are some individuals--by virtue of their status, power and/or wealth--exempt from waiting? What is the protocol for waiting in line? Is it an orderly procedure, as in the United Kingdom, or do people just nudge their way through the crowd, pushing the

people ahead of them, until they somehow make their way to the front, as in India? Is there a procedure for buying oneself a place in front, or off the line completely? What social message is being sent when the accepted rules are broken?

The pace of life

There are profound differences in the pace of life on many levels—individual temperament, cultural norms, between places, at different times and during different activities. The consequences of the pace of life for individual, social and economic wellbeing are often double-edged.

For example, in a series of field experiments conducted in 31 countries, Levine and his colleagues (e.g., Levine and Norenzayan, 1999) found that the pace of life of a city was related to the physical, social and psychological wellbeing of individuals. On the negative side, faster places tended to have higher rates of death from coronary heart disease, higher smoking rates, and were less likely to take the time to help strangers in need. On the positive side, however, faster places were more economically healthy, and residents tended to self-report being somewhat happier in their lives. These seemingly contradictory findings were related to the double-edged conseuences of economic productivity. Economic needs are primary forces in creating a sense of time urgency, and that sense of time urgency in turn leads to a productive economy. The resultant work norm has both positive and negative consequences. On the one hand, the focus on making every minute count and being productive creates the stressors that lead to cigarette smoking and coronary heart disease. On the other hand, they provide sufficient resources to meet peoples' basic needs, which both Easterlin and his critics agree is related to happiness. The key is to achieve a balance in time use between economic productivity and personal welfare in order to minimize the costs and maximize the wellbeing of individuals and their communities.

Measuring time use

Social scientists and economists have developed a number of methodologies to measure time use. The most traditional approaches have used retrospective interviews and surveys. Kahneman and his colleagues, for example, have constructed a sophisticated time use diary measure in order to understand the consequences of temporal behaviors for wellbeing (Kahneman et al., 2004). A number of other more general, regularly conducted surveys (e.g. the Gallup polls) include questions about time use and time balance.

Most commonly, however, researchers have collected data through self-recorded time diaries. These diaries use a variety of methods. Some ask respondents to keep a paper-and-pencil daily diary of how they spend their

time. More technologically sophisticated "experience sampling" techniques ask individuals to carry a portable e-device. The device beeps at random intervals during the day and prompts them to answer a series of questions describing what they are doing, what they are thinking about and how they are feeling at that particular moment.

There are a number of extensive data sets reflecting individual time use. Two of the best sets come from the "Multinational Time Use Study" and the "American Heritage Time Use Study," both of which are available at the website for the Centre for Time Use Research at Oxford University (http://www.timeuse.org). These data may provide valuable information not only by tracking patterns of time use, both at the individual and national level (e.g., Fisher and Robinson, 2009) but, in addition, demonstrating how these activities impact wellbeing (Kahneman et al., 2004). Sophisticated statistical techniques have and are being developed to better understand relationships like these. Social scientists and economists have constructed weighted formulas that determine not only average happiness during individual activities but which help to understand more nuanced patterns. For example, Gershuny (2012), of the Centre for Time Use Research, has recently published a measure of 'National Utility' (NU) that quantifies the hedonic value of different activities experienced by individuals. There are also a number of useful measures of perceived time use that may be drawn upon (e.g., Kasser and Sheldon, 2009; Zimbardo and Boyd, 1999). These data can be used to develop policies that maximize the perceived quality of experienced time within a cultural context.

Major research findings

Brief summaries of research findings that form the background for proposed policy recommendations include studies within both the objective and subjective paradigms of time use.

- There are large international differences in work hours. There are also large international differences in the degree to which official policy controls the number of hours. These data have been presented in different formats, sometimes with differing outcomes, by different sources. The following statistics are from the Organisation for Economic Co-operation and Development (for more detailed data and trends over time, see: OECD, 2013).
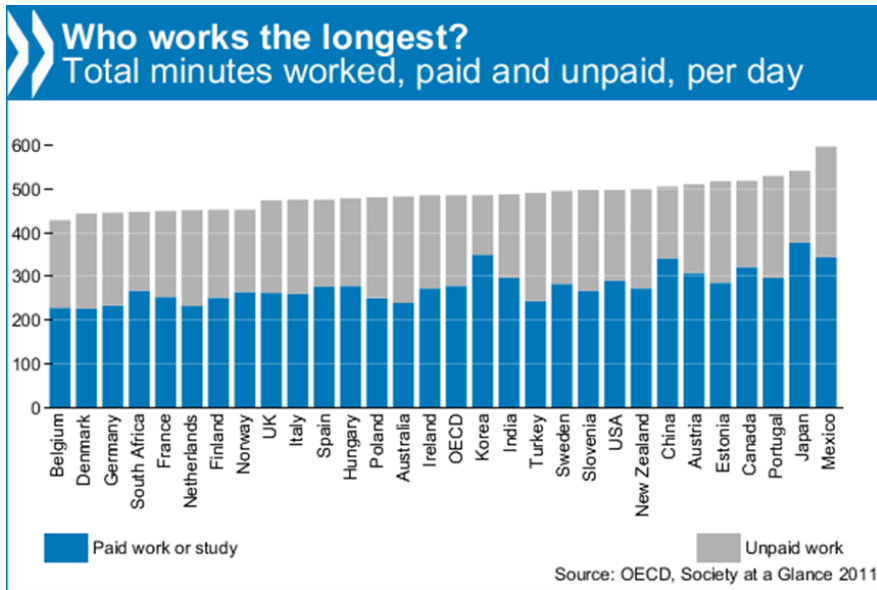
Table 4. *Who works the longest?*

- The European Quality of Life Survey reveals a strong correlation between time use and subjective wellbeing, finding that people who had long work hours and poor work-life balance generally have low subjective wellbeing (Böhnke, 2005).

- Research on time affluence shows that people with shorter work hours are more satisfied with life, engaged in more positive environmental behaviours, and have smaller ecological footprints (Kasser and Sheldon, 2009).

- Work hours have ramifications beyond that of individual happiness. For example, a recent study demonstrates that significant reductions in carbon emissions are possible through reducing work hours, and could help to reduce climate change (Rosnick, 2013).

- Happiness researchers find that among daily activities, paid work ranks next to last in reported satisfaction, ranking above only the hated morning commute. Active leisure activities (including intimate relations), socializing and meals produce the highest reported satisfaction, with passive leisure (e.g., rest, shopping and domestic chores in the middle. Volunteering, not included in these studies, seems to have a highly positive effect on happiness (Diener and Biswas-Diener, 2008).

- Objective leisure time availability (as assessed by time use survey) does not necessarily translate into subjective perception of its availability. Since 1965, the leisure time in the Western countries has increased by 5-7 hours a week, yet the majority of respondents experience a subjective decrease in their leisure time. On average, respondents estimate that they have fewer than 20 hours of free time a week, which is about half of what they actually have (Sullivan and Gershuny, 2001).

- There are large between-country differences, both officially and unofficially mandated, paid and non-paid, in various domains of non-work time. These include: holidays and vacation time, short- and/or long-term sick leaves, personal days, paid leave for jury duty, bereavement leave, community service leave, floating holidays (the option to take assigned holiday days when one wishes), sabbatical leaves, options to borrow leave time, options to buy leave time, and options to contribute leave time to another employee. A few countries have created especially liberal leave policies. Sweden, for example, has offered both extended maternity and paternity paid-leaves after the birth of a child. An example of cross-national differences in paid vacation time, even when examined in OECD nations, is seen in a 2007 analysis by the Center for Economic and Policy Research (Ray and Schmitt, 2007):

Figure 8. *Paid vacation and paid holidays, OECD Nations, in working days*

- Pentland, Harvey and Walker (1998) analysed time use by men with spinal cord injury. Contrary to their own predictions, they discovered that the amount of time spent in any (even preferred) activity was not predictive of life satisfaction, but the satisfaction with time use (or satisfaction with the balance of time use) was strongly predictive of life satisfaction/wellbeing. They conclude that "objective characteristics of time use (i.e. minutes) matter far less than the conceptual intrinsic aspects of the time (meaningfulness, challenge, satisfaction) for the individual" (p.20).

- Feeling in control of one's time is an important predictor of satisfaction with time use (Gordon and Caltabiano, 1996; Hafstrom and Paynter, 1991; Boniwell, 2009). Zuzanek (2004) found that people in managerial positions working longer hours report higher satisfaction with work and less time crunch than those working shorter hours in low-choice and control occupations. He writes: "People can work longer hours without feeling 'time crunched' if they have freely chosen their work and are interested in it" (p.131).

- A large number of studies indicate the benefits of autonomy at work (reviewed in Gagné and Bhave, 2011), which is associated with higher employee engagement, wellbeing, and work performance in different work contexts and cultures. Ability to influence or determine one's work schedule, extent of engagement, location of work, type of work, time of retirement is associated with increased wellbeing and higher work-life balance.

- Time use surveys indicate the increases in free time have been devoted to television viewing. In fact, one of the proposed explanations for the Easterlin paradox is the re-investment of free time into television watching. Currently, the average daily time spent in front of TV is 3h32min in France, 4h in the UK and 5h11 min US, accounting to 10 years of watching TV vs. 9 years of working in an average lifetime). TV viewing is associated with boredom, a low level of concentration, a low level of potency, lack of clarity of thought, higher materialism, fewer social ties, lower sleep, and higher fear of death, higher obesity, and increase in upwards social comparison. The profound increase in time spent on other electronic media (computers, cellphones) adds dramatically to these findings (Desmurget, 2012).

- Time perspective, or a cognitive bias towards locating thoughts and actions in the domains of either past, present or future has a strong influence on all aspects of wellbeing. Individuals with a balanced TP are

happier than the rest of population, both in terms of hedonic and eudaimonic wellbeing, scoring higher on measures of satisfaction with life, positive affectivity, subjective happiness, optimism, self-efficacy, self-actualisation, purpose in life and time competence (Boniwell et al, 2010).

- Feeling rushed tends to be more damaging than being busy (Levine, 2005). Robinson (2012) asked people two questions: (1) How often do you have time on your hands? (2) How often do you feel rushed? Findings from the United States indicate that self-reported happiness is highest in people who are less rushed and have less excess time. Again, it would be helpful to measure cross-cultural differences nations on these questions.

Considerations underlying policy recommendations

What is the most constructive balance between work and non-work hours, and the composition of activities within these hours, from the perspective of all participants—the worker, the family, the community, the organization and the nation? How can policies be developed that take into account cultural differences concerning beliefs about time? It is important to answer these questions with a long range perspective. Some general issues that must be considered in policy decisions:

Human rights issues must take priority

All policies must begin with this value in mind. This especially concerns policies pertaining to such issues as total work hours, workplace conditions, and coercion and exploitation of lower status individuals. This is especially pertinent to policies concerning women, children and other disadvantaged, less powerful groups.

Supporting relationships/relatedness and families

Giving people more opportunities to establish and maintain relationships, give and get social support in different life domains (family, work, unpaid work, etc.) leads to higher experience of relatedness and higher wellbeing. There is a particular need to formulate policies that enable workers to balance their jobs and family lives. This balance is strongly affected by other needs and behaviors within particular cultures. A special concern is gender expectations. Policies should both reflect the increasing numbers of women entering the labor market and insure a balance that does not shortchange their children and families.

Avoid overwork and burnout

Workers who are forced to work excessive hours in the short-term are more prone to the "burnout" syndrome. This has negative consequences for all involved (e.g., Maslach, Schaufeli and Leiter, 2001). It takes a toll on the psychological and physical wellbeing of the worker and is ultimately costly to

the organization which is left with a less productive worker in the long run. The challenge is to develop policies that reduce the probability of burnout while maintaining sufficient hours and energy devoted to production.

Encourage time use that benefits community engagement and vitality

Provide people with more opportunities to engage into activities that are synergic in the sense that they benefit their own wellbeing and that of other people, society as a whole. Increased focus on production may have the unfortunate consequence of decreasing the time people devote to help others. For example, in a series of field studies conducting in 23 cities around the world, Levine and his colleagues found a negative relationship between the overall pace of life of cities and the likelihood that residents would offer help to a stranger in need (Levine, 2003; Levine, Reysen and Ganz, 2008).

Two of the core components of the vision of Gross National Happiness developed in Bhutan are connectedness and service. The Prime Minister of Bhutan observed "We know that true abiding happiness cannot exist while others suffer, and comes only from serving others, living in harmony with nature, and realizing our innate wisdom and the true and brilliant nature of our own minds . . . That our work only exists to serve others is the very essence of Gross National Happiness." He adds: "A GNH-educated graduate will have no doubt that his or her happiness derives only from contributing to the happiness of others." These assertions are supported by recent research. For example, Diener and his colleagues (e.g. Diener and Biswas-Diener, 2008) report considerable evidence that happier people are better citizens at work, e.g. they tend to help others more, do better in social relationships, are more capable in difficult situations, are better liked by others and, on average, are more altruistic and attentive to the needs of others. Policies concerning time use should reward these behaviors.

Strive for an optimal balance between flexibility and clarity

On the one hand, policies should be as flexible as possible (see below). It is best to avoid either/or policies. On the other hand, policies must be sufficient clear that they will be enforced.

Policies must be sensitive to the cultural context

Cultures differ on many characteristics that reflect fundamental beliefs and values. The previous section (Section III) described a number of culturally-sensitive temporal dimensions. There are also well-documented differences concerning more general culture-specific values that need to be considered. For example, policies should be sensitive to cultural differences in:

   a. Emphasis on status distinctions: Are status distinctions embraced or resisted? Some cultures are more hierarchical (e.g. Japan) than others

(e.g. the U.S.A.). Policies based on strict distinctions will not be appropriate in some cultures and vice versa.

b. Individualism vs. collectivism: Western cultures tend to place an emphasis on individuals and their nuclear family. Asian cultures tend to place priority on the greater collective.

c. Emphasis on achievement: There are cultural differences in values reflecting the importance of achievement. This is especially the case when it comes to sacrificing other activities, such as spending non-work time with people or in other leisure activities.

These are just a few examples of cultural differences in values and norms (see: Heine, 2011) for a more extensive discussion of cultural differences). The important point is the need to be sensitive to cultural differences when designing policies and to be wary of trying to apply a policy that may be appropriate in one culture to others.

Policies must be crafted with flexibility to optimally match the skills and temperaments of individuals within these cultural contexts

There are also vast individual differences within cultures on all of the temporal dimensions in Section I.II. To take just one example, not only are some cultures more oriented toward working on a schedule but, within cultures, some workers may prefer to work on clearly defined schedules while others may prefer to complete their work on their own schedules.

Policies must be crafted with sufficient flexibility to take into account the nature of particular jobs and tasks within jobs

The specific behavioral content of activity is not as important as the 'person-activity fit' (Lyubomirsky, Sheldon and Schkade, 2005). In a corporation, for example, some positions may require tight scheduling of time (e.g. accountants during tax time). On the other hands, employees in research and development may be most productive when less tightly controlled. Therefore, when it comes to increasing happiness that results from balanced time use, policy measures promoting the opportunities for choice are expected to be more effective than those promoting specific behaviors'.

Encourage autonomy and control of how people spend their time.

For the destitute, time poverty is often unavoidable given the amount of time spent in inefficient, poorly paid, time-intensive activities simply to feed, clothe, and house one's family. For those who are not materially poor, good time balance is at least partly a matter of subjective experience. The importance of creating a sense of autonomy and control, both inside and outside the workplace, is central to this aspect of wellbeing.

Providing people with more autonomy and control in different life domains encourages them to engage in consciously chosen activity, rather than that imposed upon them. This leads to higher quality of time spent. Research has shown that high levels of goal progress or attainment predict increased wellbeing (Brunstein, 1993; Sheldon, 2002). However, this increase is most likely when the goals a person chooses and attains are self-concordant (Sheldon and Elliot, 1998; 1999; Sheldon and Kasser, 1995; 1998), which has been shown to apply to both Western and non Western cultures (Sheldon et al., 2004).

This applies to leisure time as well as work time. It is notable that leisure time may be fast-paced and over-scheduled, but is far more likely to include self-chosen activities. Domestic chores, shopping, etc. are likely to combine both reasonable self-choice as to schedule *and* activities done for the sake of necessity rather than interest, placing them between work and leisure/socializing in terms of reported satisfaction. A sense of control also applies to longer-term temporal issues, such as job security and retirement age and conditions.

Psychologists have developed numerous methods for enhancing autonomy. One, for example, is by encouraging mindfulness (which is a resource necessary for making choice) by providing time and encouraging people to focus on their life and life of other people, to devote time to choosing and evaluating their life goals, making them more self-congruent (Brown and Ryan, 2003).

Support competence.

Giving people, particularly those from disadvantaged groups (unemployed, retired, disabled) more opportunities to avoid feeling powerless and experience competence. A specific aspect of this is supporting effortful action, rather than passive consumption. An effort has to be made in order to feel one's ability to change something in oneself or in the world. Another aspect is supporting meaning experience in people by providing social messages about universal human values that may make bring meaning to life for the person and other people.

Recommendations for policy measures

We propose a series of policies to enhance the quality of objective and subjective time use:

Productive work hours

Because work takes roughly one third of the time we spend as adults, wellbeing at workplace might be nearly as important to policy makers as physical health.

Recommendation 1: Introduction of a mandatory shorter maximum working week of 35 hours.

Moving towards a shorter or compressed working week would serve three major purposes: (1) safeguarding the natural resources of the planet through breaking the "earn more, spend more" cycle and consuming less energy, (2) increasing individual and community well-being through utilising free time for communication, family- or community-building activities, (3) building a more robust economy through increased per-hour productivity, reducing absenteeism caused by stress related to work-life imbalance and reduction in unrealistic borrowing (Coote, Franklin and Simms, 2010).

Case study: It is an axiom in happiness research that people do not necessarily know what will make them happy (Gilbert, 2006). Most importantly, in this case, people often believe that what will make them happiest is more money. But substantial data exists to show that money is often less consequential then more time. A recent story from Amador County, California, illustrates this point rather clearly.

In 2009, under financial pressures, the county supervisors of Amador County voted to limit all but essential employees to a four-day week for nine hours each day. Salaries would be cut by ten percent commensurate with a ten percent reduction in work hours. Workers and the union which represents them protested vociferously but the county argued that, otherwise, it would have to lay off employees. Union leaders agreed to the arrangement, but for only two years.

In 2011, county workers were given a choice of returning to a five-day week with a pay increase and losing some of their colleagues to layoffs, or remaining with four days at reduced pay. Without directly consulting its members again, the union chose the five-day week. The returning employees soon had second thoughts. Many were unhappy because they were actually enjoying their four-day weeks. In August, the union polled its members. Seventy-one percent chose to return to the shorter week, even with less pay. Only 29 percent wanted to keep the longer workweek.

The Amador County story, however small in scale, deserves attention. It is clear that the extra day off has relieved stress and improved family life for many workers. It may also be reflected in better health outcomes. We need studies to understand whether or not this is the case, since it might also be possible that nine-hour days and faster work schedules have negated some of these gains. Clearly, however, the reduced schedule became preferable to most workers. Moreover, it saved the jobs of ten percent of the work force (de Graaf, 2012).

Recommendation 2: Place reasonable caps on overtime hours or incentives to businesses to reduce overwork (e.g., by fixing minimum compensation for overtime).

Working long hours is associated with a wide range of adverse health outcomes and increased safety risks, as well as lower psychological wellbeing (Nishiyama and Johnson, 1997; Burke and Fiksenbaum, 2008). Placing reasonable caps on overtime hours has beneficial effects, as it prevents health problems resulting from overwork, improves the work-life balance and quality of relationships, particularly in dual-earner couples (Glorieux, Minnen and van Tienoven, 2011) and working mothers (Scarr, Philips and McCartney, 1989). Kasser and Sheldon (2009) suggests placing reasonable caps on the maximum number of hours a person can work, providing workers with a right to refuse overtime after 48 hours on the job per week. This will increase workers' sense of autonomy and give them more time to spend with family and friends and to participate in civic and volunteer activities, benefiting the wider community.

Recommendation 3: Limit night work, whenever possible

Night work involves workers remaining awake and performing duties at a time when their body is biologically programmed to be asleep (Pati, 2001; Horowitz and Tanigawa, 2002). Night work can be potentially dangerous as it increases the risk of accidents, the mortality rate and it also decreases the performance of workers (Knutsson, Hammar and Karlsson, 2004; Santhi et al., 2005). Working at night has also shown to alter sleep patterns of workers and disrupt circadian rhythms (Buxton et al., 2000). It also negatively affects performance, increases occupational stress and tiredness, resulting in a decline in quality of family and social life (Fujino et al., 2001; Suzuki et al., 2004). Studies also show that more errors are made by night workers (Coffey, Skipper and Jung, 1998).

Many studies have highlighted night shift related problems in nurses (Kemp, 1984; Infante-Rivard, Dumont and Montplaisir, 1989; Minors, Healy and Waterhouse, 1994). A study involving 55 nurses found that night work resulted in lower concentration, interest, energy and sleep (Adeniran et al., 1996). Knauth (1993) suggests that night work should be limited as much as possible, as it does not suit the majority of shift workers. The negative effects of night shifts such as sleep disturbance and sleepiness is widely acknowledged, as well as numerous other health problems associated with night work (Crofts, 1999; Davis, Mirick and Stevens, 2001; Horowitz et al., 2001; Wagner et al., 1998). Night workers are likely to rely on alcohol to cope with sleep problems (Ohida et al., 2001) and have a disrupted social life (Ohida et al., 2001; Behar and Tilley, 1999). The disruption of social life may be measured in "unsocial time,"

meaning time that others are socializing during non-work hours that the individual cannot engage in.

Work schedules and content

Recommendation 4: Encourage worker-oriented and/or initiated flexibility

In both industrialized and developing nations, flexible arrangements have tended to be primarily designed and put in place by employers to maximize their own profits. However, in a limited number of countries these arrangements have been designed to be of mutual benefit to employers and employees. These plans have been most common in Europe but have appeared in rare instances in undeveloped countries. For example, legislative reforms in Senegal several years ago established policies intended to give workers the ability to adapt their work schedules to benefit their personal lives. These types of plans, which target the mutual benefit of employees and their employers, should be highly encouraged by policies. This is one domain where a single policy would appear to be beneficial across cultures (Lee, McCann and Messenger, 2007).

Recommendation 5: Develop alternate work schedules that maximize morale and wellbeing

Although alternate work schedules per se do not improve work-life balance, ability to control one's schedule is associated with better perceived work-life balance, regardless of the number of hours worked (Tausig and Fenwick, 2001). Many arrangements have been tried. It is important to note that although these arrangements can potentially serve the best interest of workers, precautions must be taken, particularly in underdeveloped countries and lower level jobs, to prevent their being used to exploit workers. Three examples of arrangements that have proven successful when done with these precautions in mind, are:

a. Hours averaging or modulation: These arrangements typically specify an average number of hours to be worked each week but allow workers to meet this target by averaging out their hours over a longer period of time, anywhere from several weeks to a year. These arrangements are becoming more common in some countries, e.g. Brazil, China, the Czech Republic and Hungary (reported in: Lee, McCann and Messenger, 2007).

b. Weekly rest periods: There are two main variants on this type of arrangement. The first is to provide a longer period of weekly rest. Some countries where the normal work week has been six days are moving toward extending the weekly rest period to two days. In Malaysia, for example, the main trade union body (the Trades Union Congress) has set the adoption of a five-day working week as one of its top priorities. The

second variant is to more strictly enforce the prohibition of work on rest days. (Lee, McCann and Messenger, 2007).

c. Part-time work: These arrangements take many forms. They are often done at the discretion of the employer and can be exploitive. For example, two or more part-time workers may be seen as more productive than one full-time employee because they can work with fewer breaks, less fatigue, etc. In some cases, part-time workers are less costly because they do not qualify for benefits, vacations, etc. On the other hand, part-time arrangements, when done in proper consultation with employees and with concern for employee concerns hold the potential to benefit both workers and their employers.

Recommendation 6: Develop policies that avoid the excesses of part-time work.
Part-time arrangements, which are another type of non-traditional work arrangement, may take many forms. They are often done at the discretion of the employer and can be exploitive. For example, two or more part-time workers may be seen as more productive than one full-time employee because they can work with fewer breaks, less fatigue, etc. In some cases, part-time workers are less costly because they do not qualify for benefits, vacations, etc. On the other hand, part-time arrangements, when done in proper consultation with employees and with concern for employee concerns hold the potential to benefit both workers and their employers.

Recommendation 7: Provide incentives for employers to encourage their employees to undertake work from home.

The work from home has benefits, such as lower commute time, decrease in fuel use, and higher commitment to employer, 60% of time saved from transportation given to employer. A frequently mentioned strategy to decrease traffic congestion is to encourage more workers to work at home occasionally (Downs, 2002). Employers can benefit from the reduced operating costs of their employees working at home, such as office space, energy costs (Turcotte, 2010).

One of the primary advantages of working at home is that a better work-life balance (Kurland and Bailey, 1999) and higher levels of time use satisfaction (Wheatley, 2012) can be achieved. More specifically, greater freedom is likely as workers can choose their working hours and commuting time is also reduced, so that more time becomes available for domestic activities, such as child care and recreational activities. However, there is evidence that working from home in combination with a tendency to overwork may be detrimental to home life (Crosbie and Moore, 2004); this measure needs to be implemented in combination with capping overtime hours.

Recommendation 8: Replace unnecessary paperwork and beauracratic work requirements with more meaningful activities.

Administrative barriers lead to time spent on coping with bureaucratic obstacles. Although systematic studies of this sort are difficult and virtually non-existent, countries differ strongly by the number of hours people spend on average coping with administrative barriers. For instance, the time required to start a business ranges from 2 days to 694 days but is generally limited to 14 days in most developed countries (and those with the highest happiness levels). Psychologically, the time spent producing paperwork necessary to justify and support one's actions is not associated per se with basic need satisfaction and is perceived as meaningless and empty. Time expenses on bureaucracy also reduce the amount of time citizens can spend on productive activities and non-work activities that satisfy basic needs and increase happiness. Removing administrative barriers frees citizens up more time for meaningful time use and supports.

Recommendation 9: Encourage employer-provided services to increase workers' disgressionary time outside the workplace.

Although not strictly work-hour arrangements, some progressive companies try to offer services that save workers time they might be spending on personal maintenance during their non-work hours. Many large Silicon Valley companies in the United States have taken the lead in this movement. Google, for example, offers free express-luxury buses to its employees for their commutes. They also provide free and convenient on-site laundry, shoe repair and other employee time-saving services. A number of companies offer child-care services to employees. Facebook gives new parents extra spending money, some of which may be used to buy assistance with childcare. Stanford Medical School and other employers are providing housecleaning services and in-home delivery of dinner. Genentech helps employees find last-minute baby sitters when their child gets sick and needs to stay home from school. Companies sometimes offer personal trainers, nutritionists and even free marital counseling. "The goal is not just to reduce stress for employees, but [also] for their families . . .These type of services provide employees with more discretionary non-work time and also signal recognition of the importance of their lives outside the workplace" (Richtel, 2012).

Vacation and leave time
Recommendation 10: Mandate required paid vacation.
Kasser and Sheldon (2009) argue that all workers should have a minimum of three weeks paid vacation. There are significant cross cultural differences

regarding vacation legislation. In the European Union, the legal minimum vacation for workers is four weeks. However, there is no legal minimum in the U.S. Many poor Americans often receive no paid vacation and often feel pressure to not take it. This shows that not only do some individuals have less opportunity to physically rest and relax, they also face difficultly finding time for family and friends and pursuing hobbies, which all contribute to subjective wellbeing.

Recommendation 11: Develop policies to avoid burnout

Several policies have been successful, in the right contexts, in maintaining long-term morale, enthusiasm and productivity of workers. For example:

a. A given number of "personal days" off, at full pay, may be allocated on a monthly or annual basis. These days are in addition to vacation time.
b. "Downtime" or "personal time" may be built into the workday.
c. In other work environments, organizations have policies whereby workers are shifted into new positions when they are burning out in older ones.

Whenever possible, policies should reward good workers with leave time (see below). This may take the form of short-term leaves, extension of vacation time or longer-term sabbaticals. When done appropriately, these leaves may lead to refreshed workers, higher morale and a greater sense of belonging to one's organization, all of which lead to happier and more productive workers for longer periods of time.

Recommendation 12: Develop leave time policies for dealing with significant life events

In order to improve employees' feelings of time affluence, businesses could give workers more time off during significant life events that require specific effort to cope with (e.g. birth of a child, illnesses of family members). Currently, among nations there are substantial differences regarding the quantity and quality of family leave.

It is important to encourage paid parental leave for men and women, including a proportion of non-transferable parental leave for mothers and non-transferable parental leave for fathers. New parents in most European nations receive 14 weeks of leave at full wages or 52 weeks of leave at half wages, whereas there are more generous policies in other nations (i.e. Cuba, Uzbekistan, South Korea). However, paid parental leave is not guaranteed in nations such as Liberia, Papua New Guinea, Australia and the United States.

Paid leave for new fathers is less common than for mothers. There is, however, evidence to show that promoting paternal involvement in the early years of a child's life is crucial for their later socioemotional and cognitive development (Lamb, 2004; Tamis-LeMonda and Cabrera, 2002). Research shows that Swedish fathers who use most of their leave are more engaged in their family commitment, work fewer hours and participate more in child care duties and household work (Haas and Hwang, 1999; Nepomnyaschy and Waldfogel, 2007). Furthermore, Finnish fathers who had taken parental leave reported that this allowed them to form closer bonds with their child (Huttunen, 1996). Similarly, the UK Millenium Cohort Study which includes a large, nationally representative sample of children aged 8-12 months found that fathers taking leave and working fewer hours was linked to greater involvement with the baby (Tanaka and Waldfogel, 2007). In particular, the results showed that fathers who took leave after the birth were 25% more likely to change diapers and 19% were more likely to feed and get up at night. Fathers working long hours, on the other hand, had low levels of involvement.

> *Case study:* In 2000, the Netherlands passed the Working Hours Adjustment Act, which allows workers to choose to reduce their hours of work without losing their jobs (Jacobs, 2004). Employers are required to grant these requests unless they can show financial hardship—some 96 percent of requests have been accepted. Workers then cut their hours and earn less but retain the same hourly rate of pay. Their benefits (e.g. pensions and vacation time) are pro-rated and they continue to receive full health care (while paying somewhat less for it). This is an extremely popular program and the Netherlands now has the world's highest level of part-time workers. It is very common in families with children for husbands to work four days a week and wives to work three. The popularity of the law has led to its also being adopted in Germany and Belgium.

Possible barriers: Many workers fear that their career prospects may be affected if they take leave that they are entitled to (Conference Board, 1994). In addition, workers on lower incomes will not take leave if it is unpaid (Cantor et al., 2001).

Recommendation 13: Giving workers heading for retirement a five-year window, so they may decide when it is best for them to retire and make appropriate plans (Bok, 2010).

People who took voluntary retirement have higher wellbeing than those with mandatory retirement (Kimmel, Price and Walker, 1978). Having time to plan retirement will allow workers to adapt better to their new status.

In addition, a system of phased retirement could allow workers to retire gradually, while still remaining on the job for part of the time. This could be

made possible by laws allowing parts of one's pension or social security to be received earlier. Such a program would allow older workers to stay on the job longer (reducing the impact on pension programs) while also opening new jobs for younger workers and allowing the older workers to mentor them. Some organizations, notably many universities and colleges, already do this.

Individual growth and improving the quality of time use

Recommendation 14: Develop policies that enhance peoples' control of their time. Policies should be developed that give workers as much decision-making in matters that affect their time use as possible. Whenever possible, individuals should, at the least, be consulted in these matters. When done appropriately, this leads to both greater satisfaction and greater and production both in the short- and, especially, in the long-term.

Recommendation 15: Provide opportunities for enhancing individual growth and wellbeing

In order to achieve a meaningful time use that leads to happiness, self-congruent goals are needed. Time spent in order to formulate those goals is generally neglected in our societies. However, personal growth happens during pauses in life when people exercise mindfulness to reach a new creative balance between their personal values, life goals, and life circumstances by choosing a way that is subjectively experienced as the best choice in a given situation, which is a way to meaning (Längle, 2007). In order to encourage good time use and prevent burnout, Längle (2003, p.141) suggests to question oneself: "Why am I doing this? Do I like doing this? Do I get something out of this activity right now? Do I want to live for this – will I want to have lived for this?"

Possible measures include supporting organizations that provide opportunities for breaks during the workday (the worker is free to choose the time), providing tax benefits to organizations that offer psychological support or free coaching sessions to their employees.

Recommendation 16: Provide education and counseling for enhancing balanced time use

Policies may also be formulated to encourage a more balanced time perspective. Integral profiles of time perspective are more strongly associated with happiness and wellbeing than individual dimensions (see Boniwell et al., 2010, for a review). The happiest people are those with a balanced time perspective (those who are able to balance the present-day enjoyment with sacrificing their time to long-term goals). Balanced time perspective is associated with more beneficial time use. This can be enhanced by means of public social

advertisements and by means of policies that encourage a longer-term perspective and thinking in countries with strong hedonism and materialistic values, and policies that encourage people to enjoy present day in countries with strong future perspective. Overall, these policies fall into categories described for the above subdomains, but they need to be differentiated by countries and social groups and based on the results of empirical studies of time perspective and values in different groups, in order to develop approaches towards the balance.

Recommendation 17: Encourage critical thinking about the influence of media on time use

Free time has increasingly been devoted to television viewing and other passive, often mindless, electronic media activities. It has been demonstrated, however, that these activities do not give us much pleasure and is associated with boredom, a low level of concentration, a low level of potency, lack of clarity of thought and lack of flow (Csikszentmihalyi, 1992). In addition to education about these realities, policies that limit the delivery of mindless, passive television and other media use in young children, especially those exploiting their inability to think critically, are exploited may be developed. It is also important to encourage active undertakings during leisure time.

Other possible measures associated with TV viewing are banning of TV advertising for children and limiting advertising for adults (Gaucher, 2012, p.63; Kasser et al., 2004), introducing a clear border between TV programs and advertising + no increase in sound level, progressive TV tax depending on time spent watching, introduction of public health promotion campaigns on the dangers of young children exposure to TV. Time use research on re-directing of free time suggests that simply freeing up working time will not automatically result in increased wellbeing unless measures are taken to dramatically reduce TV watching and other passive media activities.

More generally, policies should help to encourage critical thinking about the limitations, costs and other consequences of materialistic values and how they are promoted. Kasser (2006) suggests that in order to increase people's resistance to materialistic values, they could be taught to view commercial advertising more critically. The rationale behind such "media literacy" programs is that if people are made aware of the techniques used in advertising and how these are used to influence perceptions, emotions and beliefs, then people may be less vulnerable to the automatic processes that advertisers employ in order to sell their products. In conjunction, taken together, these measures can enhance the quality of peoples' decisions concerning how they use their time.

Sleep quality

Recommendation 18: Introduce measures to improve sleep quality

Sleep quality is one of the strongest predictors of enjoyment of activities the next day (Kahneman and Krueger, 2006). Noise can lead to qualitative, rather than quantitative sleep deprivation (Freedman et al., 2001) which may affect psychological wellbeing, although the long-term detrimental effects of night-time noise on health are still not shown (Muzet, 2007). Legal measures can be taken to avoid sleep disturbances resulting from noise (e.g., construction, traffic, loud public activities).

Systematic tracking of time use

Recommendation 19: Systematically monitor time use

Systematic monitoring of individual and group-level time use, and peoples' perceptions of the value of their activities, should be mandated (see section II.I). These data are essential to formulating policies that maximize the wellbeing of workers as well as their families, employers and communities.

Summary and Conclusion

The present chapter reviewed the literature and offered policy suggestions concerning the issues of time use and time balance as they relate to wellbeing both on the individual and societal levels. It has attempted to underscore the importance of individual-level variables such as conscious choice, the perception of control, focus upon intrinsic goals (helping other people, establishing relationships, developing and growing as a person, maintaining health and balance in one's life), and being sensitive to individual, cultural and situation-specific differences. The evidence supports the thesis that societies that care about healthy time use at the individual level also benefit as a whole. Although caring about people's wellbeing may not bring a strong short-term increase in productivity, it is a more psychologically sustainable way of social existence that has long-term benefits and is a new step towards creating an economics based on human development, rather than exploitation.

In conclusion: Good time use is use of time in ways that are seen as meaningful and self-congruent and that benefit one's family, employer, community and the larger local and global environment.

References

Adeniran, R., Healy, D., Sharp, H., Williams, J. M. G., Minors, D. and Waterhouse, J. M., 1996. Interpersonal sensitivity predicts depressive symptom response to the circadian rhythm disruption of nightwork. *Psychological Medicine*, 26(06), 1211-1221.

Alcock, A., 1971. *History of the International Labour Organisation.* London: Macmillan.

Behar, P. and Tilley, A. J., 1999. The impact of night work on psychological wellbeing. *Ergonomics Journal*, 32, 1089-1099.

Bluedorn, A., 2002. *The Human Organization of Time: Temporal Realities and Experience.* Palo Alto, CA: Stanford Business Books.

Böhnke, P., 2005. *First European Quality of Life Survey: Life Satisfaction, Happiness, and the Sense of Belonging.* Luxembourg: Office for Official Publications of the European Communities.

Bok, D., 2010. *The politics of happiness: what government can learn from the new research on wellbeing*, Princeton University Press

Boniwell, I., 2009. *Time for Life: Satisfaction with Time Use and Its Relationship with Subjective Wellbeing.* Saarbrucken, Germany: VDM.

Boniwell, I., and Zimbardo, P., 2003. Time to find the right balance. *The Psychologist, 16*(3)

Boniwell, I., Osin, E., Linley, P.A. and Ivanchenko, G., 2010. A question of balance: Examining relationships between time perspective and measures of wellbeing in the British and Russian student samples. *Journal of Positive Psychology, 5*(1), 24-40.

Brislin, R. and Kim, E., 2003. Cultural Diversity in People's Understanding and Uses of Time. *Applied Psychology: An International Review, 52* (3), 363–382.

Brislin, R., 2000. *Understanding Culture's Influence On Behavior*. 2nd ed. Fort Worth, TX: Harcourt.

Brown, D. W., Balluz, L. S., Heath, G. W., Moriarty, D. G., Ford, E. S., Giles, W. H. and Mokdad, A. H., 2003. Associations between recommended levels of physical activity and health-related quality of life. Findings from the 2001 Behavioral Risk Factor Surveillance System (BRFSS) survey. *Preventive medicine, 37*(5), 520.

Brunstein, J., 1993. Personal goals and subjective wellbeing: A longitudinal study. *Journal of Personality and Social Psychology, 65*, 1061–1070.

Burke, R. J. And Fiksenbaum, L., 2008. Work hours, work intensity and work addictions. R. Burke (Ed.). Workaholism and Long Hours Working. Cheltenham, UK and Northampton, MA, USA: Edward Elgar, 3-37.

Buxton, O. M., L'Hermite-Balériaux, M., Turek, F. W. and van Cauter, E., 2000. Daytime naps in darkness phase shift the human circadian rhythms of

melatonin and thyrotropin secretion. *American Journal of Physiology-Regulatory, Integrative and Comparative Physiology,* 278(2), 373-382.

Cantor, D., Waldfogel, J., Kerwin, J., Wright, M. M., Levin, K. and Rauch, J., 2001. *Balancing the Needs of Families and Employers.* Rockville, MD: Westat.

Clark, S. M., Harvey, A. S. and Shaw, S. M., 1990. Time use and leisure: Subjective and objective aspects. *Social Indicators Research,* 23, 337-352.

Coffey, L. C., Skipper Jr, J. K. and Jung, F. D., 1998. Nurses and shift work: effects on job performance and job-related stress. *Journal of Advanced Nursing,* 13(2), 245-254.

Conference Board, 1994. Family and medical leave. *Work-Family Roundtable,* 4(6), 1-14.

Coote, A., Franklin, J. and Simms, A., 2010. *21 hours: Why a Shorter Working Week Can Help Us All To Flourish in The 21st Century.* London: New Economics Foundation. (URL: http://www.neweconomics.org/sites/neweconomics.org/files/21Hours.pdf).

Crofts, L., 1999. Challenging shiftwork: a review of common rostering practices in UK hospitals. *Nursing Progress,* 9(30), 46-56.

Crosbie, T. and Moore, J., 2004. Work-life balance and working from home. *Social Policy and Society,* 3(3), 223-233.

Csikszentmihalyi, M., 1992. *Flow: The Psychology of Happiness.* London: Rider

Davis, S., Mirick, D. K. and Stevens, R. G., 2001. Night shift work, light at night, and risk of breast cancer. *Journal of the National Cancer Institute,* 93(20), 1557-1562.

De Graaf, J., 2003. *Take Back Your Time: Fighting Overwork and Time Poverty in America.* San Francisco, CA: Berrett-Koehler.

_____ 2012, July 2nd. Life away from the rat-race: Why one group of workers decided to cut their own hours and pay. AlterNet (URL: http://www.alternet.org/story/156126/life_away_from_the_rat-race%3A_why_one_group_of_workers_decided_to_cut_their_own_hours_and_pay).

Desmurget, M., 2012. *TV Lobotomie.* Paris: Max Milo Éditions.

Diener, E. and Biswas-Diener, R., 2008. *Happiness: Unlocking the mysteries of psychological wealth.* Malden, MA: Wiley/Blackwell.

Downs, A., 2002. *Still Stuck inTraffic: Coping with Peak-Hour Traffic Congestion.* Washington: Brookings Institution Press.

Easterlin, R. A., 1974. Does Economic Growth Improve the Human Lot? In: P. A. David and M. W. Reder, eds. *Nations and Households in Economic Growth: Essays in Honor of Moses Abramovitz*. New York: Academic Press, Inc.

Fisher, K. and Robinson, J., 2009. Average weekly time spent in 30 basic activities across 17 countries. *Social Indicators Research*, 93, 249-254.

Freedman, N. S., Gazendam, J., Levan, L., Pack, A. I. and Schwab, R. J., 2001. Abnormal sleep/wake cycles and the effect of environmental noise on sleep disruption in the intensive care unit. *American Journal of Respiratory and Critical Care Medicine,* 163(2), 451-457.

Fujino, Y., Mizoue, T., Izumi, H., Kumashiro, M., Hasegawa, T. and Yoshimura, T., 2001. Job stress and mental health among permanent night workers. *Journal Of Occupational Health-English Edition,* 43(6), 301-306.

Gagné, M. and Bhave, D., 2011. Autonomy in the workplace: An essential ingredient to employee engagement and wellbeing in every culture. *Human Autonomy in Cross-Cultural Context,* 163-187.

Gallup poll, 2011, May 31. U.S. Job Satisfaction Struggles to Recover to 2008 Levels. (URL: http://www.gallup.com/poll/147833/job-satisfaction-struggles-recover-2008-levels.aspx).

Gaucher R., 2012. *Bonheur Et Politiques Publiques.* Paris: L'Harmattan.

Gershuny, J., 2012. National utility: Measuring the enjoyment of activities. *European Sociological Review,* 1-13.

Gilbert, D., 2006. *Stumbling on Happiness.* New York: Knopf,

Glorieux, I., Minnen, J. and van Tienoven, T.P., 2011. Spouse "together time": Quality time within the household. *Social Indicators Research,* 101(2), 281-287.

Gordon, W. R., Caltabiano, M. L., 1996. Urban-rural differences in adolescent self-esteem, leisure boredom, and sensation-seeking as predictors of leisure-time usage and satisfaction. Adolescence., 31(124):883-901.

Haas, L. and Hwang, P., 1999. Parental leave in Sweden. In: P. Moss and F. Deven, eds. *Parental Leave: Progress Or Pitfall? Research And Policy Issues In Europe.* The Hague & Brussels: NIDI/CGBS Publications, Volume 35.

Hafstrom, J.L. and Paynter, M.A., 1991. Time use satisfaction of wives: Home, farm, and labor force workload. *Lifestyles,* 12, 131-143.

Hall, E. T., 1983. *The Dance of Life.* New York: Doubleday.

Heine, S., 2011. *Cultural Psychology*. 2nd ed. New York: W. W. Norton.

Horowitz, T. S. and Tanigawa, T., 2002. Circadian-based new technologies for night workers. *Industrial Health,* 40(3), 223-236.

Horowitz, T. S., Cade, B. E., Wolfe, J. M. and Czeisler, C. A., 2001. Efficacy of bright light and sleep/darkness scheduling in alleviating circadian maladaptation to night work. *American Journal of Physiology-Endocrinology and Metabolism,* 281(2), 381-391.

Huttunen J., 1996. Full Time Fathers and their Parental Leave Experiences. Björnberg U., Kollind A. K., Eds., Men's Family Relations, Stockholm, Almqvist & Wiksell International, 79-90.

Infante-Rivard, C., Dumont, M. and Montplaisir, J., 1989. Sleep disorder symptoms among nurses and nursing aides. *International Archives of Occupational and Environmental Health,* 61(5), 353-358.

International Labour Office (ILO), 1958. *Hours of Work*. International Labour Conference Report VIII. Geneva: ILO.

Jacobs, A. T., 2004. *Labour Law in the Netherlands.* New York: Kluwer Law International.

Kahneman, D. and Krueger, A. B., 2006. Developments in the measurement of subjective wellbeing. *Journal of Economic Perspectives,* 20 (1), 3-24.

Kahneman, D., Krueger, A., Schkade, D., Schwarz, N. and Stone, A., 2004. A survey method for characterizing daily life experience: The day reconstruction method. *Science,* 306. (no. 5702), 1776 – 1780.

Kasser, T. and Sheldon, K.M., 2009. Time Affluence as a path towards personal happiness and ethical business practices: Empirical evidence from four studies. *Journal of Business Ethics,* 84 (2), 243-255.

Kasser, T., 2006. Materialism and Its Alternatives. In M. Csikszentmihalyi and I. Csikszentmihalyi, eds. *A Life Worth Living: Contributions To Positive Psychology*. New York: Oxford University Press. (pp. 200-214).

Kasser, T., Ryan, R.M., Couchman, C. E. and Sheldon, K.M., 2004. Materialistic values: Their causes and consequences. In: T. Kasser and A. D. Kanfer, eds. *Psychology And Consumer Cultures: The Struggle For A Good Life In A materialistic World.* Washington, DC: American Psychological Association. (pp. 11–28).

Kemp, J., 1984. Nursing at night. *Journal Of Advanced Nursing,* 9(2), 217-223.

Kimmel, D. C., Price, K. F. and Walker, J. W., 1978. Retirement choice and retirement satisfaction. *Journal of Gerontology,* 33(4), 575-585.

Knauth, P., 1993. The design of shift systems. *Ergonomics,* 36(1-3), 15-28.

Knutsson, A., Hammar, N. and Karlsson, B., 2004. Shift workers' mortality scrutinized. *Chronobiology International,* 21(6), 1049-1053.

Kurland, N. B. and Bailey. D. E., 1999. Telework: The advantages and challenges of working here, there, anywhere and anytime. *Organizational Dynamics,* 28(2), 53-68.

Lamb, M. E., 2004. *The role of the father in child development*. 4th edn. New Jersey: Wiley.

Längle, A., 2003. Burnout–Existential meaning and possibilities of prevention. *European Psychotherapy,* 4(1), 107-121.

Längle, A., 2007. The search for meaning in life and the existential fundamental motivations. *International Journal of Existential Psychology and Psychotherapy,* 1(1). (URL: http://journal.existentialpsychology.org/).

Lauer, R., 1981. *Temporal Man: The Meaning and Uses of Social Time.* New York: Praeger.

Lee, S., McCann, D. and Messenger, J., 2007. *Working Time around the World: Trends in working hours, laws and policies in a global comparative perspective.* Geneva: International Labour Organization.

Levine, R. and Norenzayan, A., 1999. The pace of life in 31 countries. *Journal of Cross-Cultural Psychology,* 30, 178-205.

Levine, R., 1997. *A Geography of Time.* New York: Basic Books.

_____ 2003. The kindness of strangers. *American Scientist,* 91, 226-233.

_____ 2005. A geography of busyness. *Social Research,* 72, 355-370.

Levine, R., Reysen, S. and Ganz, E., 2008. The kindness of strangers revisited: A comparison of 24 U.S. cities. *Social Indicators,* 85, 461-481.

Lyubomirsky, S., Sheldon, K. M. and Schkade, D., 2005. Pursuing happiness: The architecture of sustainable change. *Review of General Psychology,* 9(2), 111-131.

Maslach, C., Schaufeli, W. B. and Leiter, M. P., 2001. Job burnout. *Annual review of psychology,* *52*(1), 397-422.

Minors, D. S., Healy, D. and Waterhouse, J. M., 1994. The attitudes and general health of student nurses before and immediately after their first eight weeks of nightwork. *Ergonomics,* 37(8), 1355-1362.

Moss, P., Deven, F., 1999. Parental leave: Progress or pitfall? Research and policy issues in Europe, Bruxelles: The Hague.

Muzet, A., 2007. Environmental noise, sleep and health. *Sleep Medicine Reviews,* 11(2), 135-142.

Nepomnyaschy, L. and Waldfogel, J., 2007. Paternity leave and fathers' involvement with their young children: Evidence from the American ECLS_B. Community, *Work & Family,* 10(4), 427-453.

Nishiyama, K., Johnson, J. V., 1997. Karoshi--death from overwork: occupational health consequences of Japanese production management. *Int J Health Serv.,* *27*(4):625-

Ohida, T., Kamal, A. M. M., Sone, T., Ishii, T., Uchiyama, M., Minowa, M. and Nozaki, S., 2001. Night-shift work related problems in young female nurses in Japan. *Journal of Occupational Health-English Edition,* 43(3), 150-156.

Organisation for Economic Co-operation and Development, 2013. OECD Stat Extracts. (URL: http://stats.oecd.org/Index.aspx?DatasetCode=ANHRS).

Pati, A. K., 2001. Chronobiology: the dimension of time in biology and medicine. *Proceedings-Indian National Science Academy Part B,* 67(6), 323-372.

Pentland, W., Harvey, A. S. and Walker, J., 1998. The relationships between time use and health and wellbeing in men with spinal cord injury. *Journal of Occupational Science,* 5, 14-25.

Ray, R. and Schmitt, J., 2007, May. *No-vacation time.* Washington, D.C.: Center for Economic and Policy Research (URL: http://www.cepr.net/documents/publications/2007-05-no-vacation-nation.pdf).

Richtel, M., 2012. Housecleaning, Then Dinner? Silicon Valley Perks Come Home. New York Times, 9 November.

Robinson, J. P., 2012. Americans less rushed but no happier: 1965–2010 trends in subjective time and happiness. *Social Indicators Research.* 1-14.

Robinson, J.P. and Godbey, G., 1997. *Time for life: The surprising ways Americans use their time.* State College: The Pennsylvania State University Press.

Rosnick, D., 2013. *Reduced work hours as a means of slowing climate change.* Washington, D.C.: Center for Economic and Policy Research (URL: http://www.cepr.net/index.php/publications/reports/reduced-work-hours-as-a-means-of-slowing-climate-change).

Santhi, N., Duffy, J. F., Horowitz, T. S. and Czeisler, C. A., 2005. Scheduling of sleep/darkness affects the circadian phase of night shift workers. *Neuroscience Letters,* 384(3), 316-320.

Scarr, S., Phillips, D. and McCartney, K., 1989. Working mothers and their families. *American Psychologist,* 44(11), 1402.

Sheldon, K. M. and Elliot, A. J., 1998. Not all personal goals are personal: Comparing autonomous and controlled reasons for goals as predictors of effort and attainment. *Personality and Social Psychology Bulletin,* 24, 546–557.

_____ 1999. Goal striving, need-satisfaction, and longitudinal wellbeing: The self-concordance model. *Journal of Personality and Social Psychology,* 76, 482–497.

Sheldon, K. M. and Kasser, T., 1995. Coherence and congruence: Two aspects of personality integration. *Journal of Personality and Social Psychology,* 68, 531–543.

_____ 1998. Pursuing personal goals: Skills enable progress but not all progress is beneficial. *Personality and Social Psychology Bulletin,* 24, 1319–1331.

Sheldon, K. M., 2002. The self-concordance model of healthy goal-striving: When personal goals correctly represent the person. In: E. L. Deci and R. M. Ryan, eds. *Handbook of Self-Determination Research.* Rochester, NY: University of Rochester Press. (pp. 65–86).

Sheldon, K. M., Elliot, A. J., Ryan, R. M., Chirkov, V., Kim, Y., Wu, C. and Sun, Z., 2004. Self-concordance and subjective wellbeing in four cultures. *Journal of Cross-Cultural Psychology,* 35(2), 209-223.

Stevenson, B. and Wolfers, J., 2008. Economic growth and subjective wellbeing: Reassessing the Easterlin paradox. *NBER Working Paper* No. 14282, JEL No. D6, I3, J1.

Sullivan, O. and Gershuny, J., 2001. Cross-national changes in time-use: Some sociological histories re-examined. *British Journal of Sociology,* 52, 331–347.

Suzuki, K., Ohida, T., Kaneita, Y., Yokoyama, E., Miyake, T., Harano, S., Yagi, Y., Ibuka, E., Kanebo, A., Tsutsui, T. and Uchiyama, M., 2004. Mental health status, shift work, and occupational accidents among hospital nurses in Japan. *Journal of occupational Health,* 46(6):448-454

Tamis-LeMonda, C. and Cabrera, N., 2002. *Handbook of father involvement: Multidisciplinary perspectives.* Mahwah, NJ: Lawrence Erlbaum Assoc.

Tanaka, S. and Waldfogel, J., 2007. Effects of parental leave and working hours on fathers' involvement with their babies: Evidence from the UK Millennium Cohort Study. *Community, Work & Family,* 10(4), 409-426.

Tausig, M. and Fenwick, R., 2001. Unbinding time: Alternate work schedules and work-life balance. *Journal of Family and Economic Issues,* 22(2), 101-119.

Turcotte, M., 2010. Working at home: An update. *Canadian Social Trends,* (91), 3-11.

Van Praag, B. and Baarsma, B. E., 2004. Using happiness surveys to value intangibles: the case of airport noise. *The Economic Journal,* 115(500), 224-246.

Wagner, A. D., Schacter, D. L., Rotte, M., Koutstaal, W., Maril, A., Dale, A. M., Rosen, B. R., Buckner, R. L., 1998. Building memories: remembering and forgetting of verbal experiences as predicted by brain activity. Science, 21;281(5380):1188-91.

Welsh, A., Thomas, M., Thorne, D., Sing, H., Rowland, L., Redmond, D. and Belenky, G., 1998. Effects of 64 hours of sleep deprivation on accidents and sleep events during a driving simulator test. *Sleep,* 21(3 Suppl), 234.

Whaples, R., 2001. Hours of Work in U.S. History. EH.Net Encyclopedia, edited by Robert Whaples. August 14, 2001. (URL: http://eh.net/encyclopedia/article/whaples.work.hours.us)

Wheatley, D., 2012. Good to be home? Time use and satisfaction levels among home-based teleworkers. *New Technology Work and Employment,* 27(3), 224-241.

Zimbardo, P. and Boyd, J., 2008. *The Time Paradox.* New York: Simon & Schuster.

Zimbardo, P. G. and Boyd, J. N., 1999. Putting time in perspective: A valid, reliable individual-differences metric. *Journal of Personality and Social Psychology,* 77, 1271-1288.

Zuzanek, J., 2004. Work, leisure, time pressure and stress. In: J.T. Haworth & A.J. Veal (Eds.), *Work and Leisure,* 123-144). London: Routledge.

Chapter 14: Good Governance

— Johannes Hirata, Thaddeus Metz, Ritu Verma and Eric Zencey

Domain description: good governance

In the first instance, the phrase 'good governance' refers to the way that a political organization such as a national government or local municipality is run. However, these days the phrase is often used to denote sound policy and practice for any large-scale institution in a state's territory, such as a university, prison or business, and even for regional and international organizations such as the African Union and the United Nations. In addition, ideas about good governance are usefully extended even to non-institutional, informal forums of decision-making for a collective, which are common in the Global South, and even a family could be seen a kind of political entity that is run in a certain way. This chapter focuses mostly on good governance in the context of a national or provincial government, although it does draw out some implications for other domains and occasionally discusses them in their own right.

Central questions about good governance include: how are decision-makers appointed?; what qualifications do they have?; what sort of input do decision-makers receive before selecting policies?; what voting or other procedures do decision-makers use to resolve conflicts amongst themselves?; how widely available is information about how they have made decisions?; do those affected by their decisions trust them and deem their power to be held legitimately?; in whose interests do decision-makers tend to act?; how have policies been implemented and monitored?; how are infractions of adopted policies prevented and responded to?; have the policies adopted been effective in upholding, say, people's rights or the environmental and other conditions necessary for them to live well?; and is the political system sustainable, viz., acquiring sufficient resources, human and otherwise, to regenerate itself over time?

The starting point for this chapter's analysis and appraisal of good governance is Bhutan's Gross National Happiness (GNH) Index, particularly as articulated in *A Short Guide to Gross National Happiness Index* (Ura et al., 2012, pp.25-28). Although this chapter takes its cue from Bhutan's understanding of good governance, as expressed in this document and others, it does not restrict itself to those considerations, and occasionally enriches them with ideas from philosophy, politics, economics and related bodies of knowledge.

Note, too, that the discussion in this chapter does not presume that any particular, extant form of government is the best one, whether Bhutan's or any other. The chapter aims to provide criteria for, and examples of, desirable governance procedures and outcomes that would be of wide interest across the globe, regardless of political setting.

Although good governance is normally viewed merely as a means to an end, this chapter begins by discussing respects in which it is arguably of intrinsic value (sec. 2), after which it discusses extrinsic benefits that good governance can be expected to bring about in the long run (sec. 3). Next, the chapter notes the most common ways that governance was approached in the 20th century (sec. 4), after which it puts forth some realistic proposals for change that merit consideration and experimentation in the 21st (sec. 5) as well as two case studies of real life 'success stories' (sec. 6). The penultimate section reflects on strategies for implementing such suggestions and monitoring their progress (sec. 7), before briefly summarizing (sec. 8).

Intrinsic value of good governance

It is natural to think of the value of good governance in strictly instrumental terms, as a mere means to an end of promoting happiness or wellbeing. Surely what makes governance good is just the fact that it tends to make people better off, so the suggestion goes.

However, such an understanding of the value of good governance fits poorly with the overall structure of the GNH Index, with which this report is aiming to acquaint the reader. If good governance were valuable *merely* as a means to the end of happiness, then only eight of the nine domains of GNH would count as elements of happiness, with the ninth of good governance being solely a tool to use in order to promote the others. Presumably, though, each of the nine domains, including good governance, is itself a constitutive element of wellbeing.

In addition, it is theoretically implausible to think of good governance merely as a means to an end. For one, common views about the nature of wellbeing suggest that the way that a government (or other organization) treats its members is something that matters for its own sake. The interaction between government and residents is plausibly thought of as a *relationship*, where many hold that certain kinds of relationship can be good in themselves for those who are a part of them (see Metz, 2009, and discussion of 'objective wellbeing' in the chapter on definitions of terms). Specifically, one might suggest that certain kinds of relationship between state and citizens would enhance the meaning of the latter's lives, particularly when they participate in programmes that improve others' wellbeing (Alkire, 2013, p.25). In addition, in light of why many

of us prize a family, some would even suggest that relationships can be desirable in themselves apart from how they affect the individual wellbeing of their members (see 'collective wellbeing' in the chapter 'Definitions of terms').

For another, many political theorists and philosophers would agree, upon reflection, that certain institutional procedures can be just apart from their likely consequences for society on grounds of respect. Most would say, for instance, that even if an utterly non-consultative decision-making process somehow produced marginally better long-term results than a consultative one, the latter should be preferred, as being desirable to some degree as a form of respectful interaction. Similar remarks go for criminal trials: it would do a defendant an injustice not to accord him the opportunity to mount a defence and to be publicly judged on the basis of evidence, even if he were clearly guilty so that such procedures were not necessary to ascertain culpable wrongdoing.

Now, GNH conceives of two of the four major aspects of good governance to be matters of 'political participation' and 'political freedom' (Ura et al., 2012, pp.25-26), and these may be understood to be desirable in themselves, at least to some degree. They are not deemed to be relevant to wellbeing simply as a means. Although it is sensible to think of good governance as being good for its own sake to some degree, other domains, such as community vitality and psychological wellbeing, are valuable in that way to a much more noticeable degree. Although good governance is probably of some intrinsic value, it is admittedly of particular concern as an extrinsic one.

Extrinsic value of good governance

Good governance is a linchpin for the other eight GNH domains. Insofar as this report makes recommendations with respect to public policy, good governance is absolutely essential for them to be implemented. If a state were poorly governed, then the chances of the other domains of GNH, such as health and education, being developed would be low. Hence, the other two of the four major aspects of good governance as conceived by GNH are 'service delivery', with respect to healthcare, electricity, water, and 'government performance' regarding the state's advancement of employment, education, culture, and the like (Ura et al., 2012, pp.26-28).

It is clear how bad governance would interfere with the opportunity for public policy to change people's lives for the better:

a state unable to sustain itself because of, say, poor tax collection would lack the resources to enact programmes to meet people's needs.

a state filled with officials who lack qualifications and have been appointed, say, as part of a system of patronage, would lack the skills to make efficient use of resources;

a state rife with corruption would squander resources that could have been used to do much more good for the public than for bureaucrats who tend already to have decent jobs;

a state that failed to consult with those affected by its policies would be inclined to overlook their interests and would tend to lack the information needed to satisfy them;

a state that served, or because of a lack of transparency were simply viewed as serving, a subset of the general population would alienate itself from the general public, whose help it needs in order to make a real difference in society;

a state that applied the law inconsistently, without public justification, or according to executive influence behind the scenes would make it difficult for citizens and organizations to plan and would generally make them insecure; and

a state that used disproportionately harsh penalties in response to infractions, e.g., 'three-strikes' laws for victimless or non-violent crimes, would prevent citizens from contributing to the wellbeing of their families and society.

In the following, this chapter focuses less on bad governance practices to avoid, and more on good ones to adopt, indicating practices that would be expected to enable a state to promote the other eight domains of GNH (and be desirable in themselves).

Traditional public policies with regard to governance

In the 20th century, there were two dominant broad approaches that states took toward political governance, neither of which was ideal, most friends of GNH would say.

On the one hand, authoritarian states used extreme coercion and deception in order to advance a particular conception of the good life centred on the development of a nation, a major political programme, or an idealized vision of human nature. All facets of government were intended to do whatever it would take to realize the relevant utopian goal, with those whom the state judged to be disinclined to support its ideology being killed, jailed or exiled, and ideas that could have competed with its programmes stifled. Some states continue to adopt a similar kind of strategy, by enforcing a single religion and killing or

otherwise severely punishing those deemed to have flouted it, e.g., house arrest for political dissent, flogging for alcohol possession, execution for atheism, jail for homosexuality, stoning for adultery.

In the cases of authoritarian regimes of the previous century (which often called themselves 'democratic' in name), violence and relatedly severe practices ultimately did little good so far as bringing about the desired goal, instead causing mass starvation and large-scale warfare, while channelling resources toward a small, political class. In addition, more contemporary forms of state coercion are usually ineffective; punishment and threats of it are unlikely to change people's deep-seated beliefs and attitudes, while refraining from expressing oneself or one's views merely out of fear is unlikely to be meaning-conferring for either the one threatened or the one threatening.

On the other hand, there have been societies in which the state decisions have been the product of majority vote by legislators who have been elected by the populace once every several years, and in which these decisions have tended not so much to promote a certain conception of the good life as to support people's rights to choose their own ways of life. According to this orientation, the state is the primary political agent, where it should generally avoid doing anything to express support for one particular religion or lifestyle, and should instead ensure access to civil liberties and financial resources that would be useful for people to achieve a wide variety of self-chosen goals.

Although these societies avoided the 'disasters' that befell the authoritarian ones, proponents of GNH would generally suggest that they are not fully satisfactory, in two major respects.

First, in terms of political power, there has been neither enough participation by the general populace, nor enough consideration given to the latter's interests by decision-makers. Once they elect people to office, citizens tend not to deliberate as a collective much about policy. In addition, representatives tend not to consult with those whom their decisions will affect. They instead usually vote in ways that will benefit their particular constituency, viz., those who voted them in and are likely to support them in the future. They are often significantly influenced by special interests with monetary influence or by those most articulate and organized, not necessarily by the most compelling reasons. And they often feel constrained to vote in accordance with the interests of big business, which is seen as providing jobs; jobs are of course good, but there are other factors to consider, such as the types of jobs, and the effects on the environment for future generations.

Second, in terms of the content of political decisions, those sympathetic toward GNH would point to the extent of poverty and other forms of grossly undesirable ways of life in the underdeveloped world, on the one hand, as well as the boredom, loneliness, isolation, neurosis, addiction, conformity, passivity, aimlessness, manipulation, repetitiveness, ugliness and lack of wisdom pervasive in life in the so-called 'developed' world, on the other.

Major research findings of current relevance

There is a proverbial 'third way' that theorists have recommended and that some states have begun to adopt in recent years. It is a matter of the *government enacting policies with public participation that are designed to promote good lives throughout society, but with a minimal use of coercion*.

First, in terms of procedure, instead of policy being decided and implemented solely by 'elites', whether elected or not, it could be influenced by constant engagement with those whom the policy affects. For instance, the state might solicit feedback in the form of surveys, or ensure that decision-makers meet with leaders on the ground, or provide resources to local communities to run their own programmes.

Second, with respect to content, instead of policy either forcing people to conform to a certain conception of the good life or leaving people utterly to their own devices when it comes to how to live, a state could seek to guide people's decision-making in certain directions, albeit without substantial punishment and threats. Specifically, a state could: provide incentives; warn of risks; inform about goods; educate the young in certain ways; adopt 'facilitative' law that would give people legal options (such as marriage); make opportunities available; oversee large-scale projects in which people may elect to participate; and use 'nudges', i.e., making it slightly more convenient for people to make choices that are in their objective self-interest without restricting or penalizing alternative choices.

These kinds of approaches would arguably deal with human freedom in the right way. Substantial happiness cannot be realized if people are forced into certain ways of life that they reject, and yet people often need help from the state in order to choose ways of life that they themselves are likely to recognize as desirable, at least upon deliberative reflection with one another (Hirata, 2013).

Below are sketches intended to prompt reflection on how good governance might be effected beyond the normal concerns for an absence of corruption and cronyism and the presence of auditable accountability and efficient bureaucracy. As indicated in the introduction, they are intended to be widely

applicable, regardless of the particular form of government currently in existence.

Including and enabling local actors

Instead of the state being the proximate agent for change, it could provide resources to other agents or coordinate their efforts in ways that would involve the public and build community. For instance, what if a state in a middle-income country asked everyone in society to lend a hand to help improve educational facilities and coordinated their contributions?

Of course the state must do what it can to fund public education as usual, but it could also, by this project, work to organize the efforts of many other, private agents, perhaps by asking: school children which resources they think would most improve their education; construction companies to put up some rooms that would serve as a school library (or whatever the children reasonably suggest, such as a chemistry centre, or a chess club, etc.); wealthier individuals with extra books to donate some to the libraries; retired persons from the local community to volunteer their time to run the library; large corporations for a portion of their social responsibility funds to assist. And the state could widely publicize, on the internet, radio and television, a list of who has contributed and how, indicating to society how far it has come toward its goal of X number of new libraries and how far it has yet to go. A state that mobilized a wide array of actors to help achieve a common goal in this way would realize many ends in one shot: it would improve social cohesion, enable people to give their time and other resources toward a concrete and desirable goal, and of course help to improve students' education.

This sort of project would not apply well to very rich countries, in which there is little such need, or in very poor ones, in which there is great need but little ability to meet it. However, nearly half of the world's countries count as middle-income, making this proposal of interest. In addition, in some wealthy countries, ones with pockets of poverty in large cities, there would be a role for this kind of project in certain neighbourhoods, where recreation centres, for instance, could be constructed and maintained.

Sharing power in political institutions

Those who have much power and who are like-minded tend to form blocs, which exclude other interests, values and strategies. What might a state be like if those with the most power were required to share some of it with those with less or those who disagreed with them?

In some governments, the final authority to make decisions is not determined by procedures that involve a vote among competent citizens. In other

governments, it is so determined, and, in most of those, one finds competitive forms of voting, in which a political party has the legal right to govern in proportion to the number of votes that it has obtained via fair procedures and to make decisions that it expects to benefit its particular constituency. From the perspective of GNH, both systems could improve the quality of their governance, and do so without upheaval.

The former, non-electoral systems could take a cue from decision-making practices in traditional sub-Saharan societies, where a chief would typically make a ruling consequent to consensus obtained among elders (Bujo, 1997). Although a monarch (or group of elites) could retain the final authority to make decisions, he might in practice generally rule after a unanimous agreement had been freely reached among an independent group of informed advisors (who perhaps have been elected by the populace) with whom he has consulted, departing from their recommendation only in rare circumstances. Another idea would be to adopt a dual-system of government akin to that of Bhutan, in which advisors are not necessarily required to obtain consensus among themselves, but instead must be populated by diverse perspectives (in Bhutan, religious ones in particular). A ruler might make it a habit to get advice from informed people who represent a variety of points of view, particularly those of the public. Such practices would improve the extent to which relevant viewpoints are given serious consideration in non-electoral systems and are included in policy-making.

Electoral systems could consider the idea proposed by several African theorists (e.g., Wiredu, 2000) of a system in which legislators are initially elected by majority vote, but are not tied to any political party, and, once elected, seek unanimous agreement amongst themselves about which policies to adopt. Instead of trying to promote any constituency's interests, representatives would adopt no law that is not the object of consensus about what would most benefit the public as a whole. Less radically, voting-based political systems could require supermajorities more often, or accord some weight to public referenda about which policies are apt. These modifications would likely result in policies that are better for the common good and would reduce alienation from political processes, as people would be better able to identify with their governments.

The obvious concern with these proposals is whether they would be truly workable. Decision-making would probably take more time if any of them were adopted. However, one idea would be to employ these approaches for issues where time is less of an issue. Another strategy would be to see whether advisors or representatives are able to appreciate the urgency of a situation and quickly do what needs to be done to obtain agreement. Either way, it would be worth running pilot programmes in restricted areas to test them out. A

provincial legislature in a large country or a king of a small country try out such power-sharing arrangements, see how things go, and report back.

Sharing power in economic organizations

These days many firms evaluate themselves in terms of a triple bottom line, include non-executive directors, and employ an external auditor. Even so, business and industry (along with other influential agents) needs to do more to move toward an ecologically sustainable economic system and more generally toward a society in which genuine wellbeing is promoted. How might the boards of large and wealthy corporations govern better and in ways that do not threaten to put them out of business?

One idea, proposed long ago by the likes of Ralph Nader, is to require not merely non-executive directors to sit on boards, but also some of them to be workers, consumers, environmentalists, leaders of local communities, professional ethicists, perhaps even artists or the like. A certain percentage of female directors could also be required. Stockholders would continue to own the firm, but ultimate decision-making authority about how to orient it would be shared with a wider variety of stakeholders.

Another idea would be for firms to become bound to a code of ethics and to be evaluated publicly by the extent to which they live up to it. This would also be a matter of sharing power, as consumers, including potentially large ones such as a government, would have a much wider array of information about the nature of firms and hence able to make better 'votes' with their wallets.

These proposals could be adopted voluntarily by a given firm. A board could on its own decide to give votes to those with clear stakes in interests other than maximizing profit, or to adopt a certain code of ethics and publicize an independent audit of how well or poorly it lived up to it. However, there would be some disincentive for a corporation to do so, if other, competing corporations were not. In order to keep the playing field level, and to bring on many firms and to do so quickly, it would be advisable for a government to require these kinds of changes 'across the board' (so to speak). If a government legally required the boards of all corporations to include directors from a wide array of backgrounds, perhaps providing a list of conditions only a percentage of which a firm would have to meet, then no particular firm would be placed at a competitive disadvantage within the relevant jurisdiction.

Distributing power over a greater range of stakeholders might itself be desirable, both for the 'donors' and recipients. Sharing decision-making is part of sharing a way of life. In addition, such sharing would make more likely decisions that result in better outcomes for social and ecological wellbeing.

Shareholders might complain of property rights being violated, if a government were to force these kinds of proposals on them. However, they do not seem qualitatively different from other legal requirements such as occupational safety rules or prohibitions against using the same firm for both internal and external auditing. Another concern from shareholders would naturally be that those without expertise in business can be expected to make worse decisions with regard to efficiency. Perhaps. But it would not be in anyone's interest to kill the goose that lays the golden egg, and presumably other board members could explain to the uninitiated why a given proposal would go too far so far as profitability is concerned.

Creating a village to raise a child

Nuclear families, let alone single-parent households, are a bad idea. Setting aside concern about gender roles, viz., that women are expected to do the bulk of cleaning and caring, running a family with children is too big a job to be done by one or two adults, especially when life in a modern economy typically requires labour to be undertaken on the job market. Supposing that to head a household is to govern a family, it makes a lot of sense to broaden the scope of those with influence and leadership. What if a state designed housing so that a dozen or so units formed a collective compound reserved for those with children and those interested in supporting them?

Perhaps the units form a circle, so that the middle is a play area for children, which all could keep an eye on. Maybe the units are spaced far enough apart for there to be privacy, and yet they are close enough for others to hear if there is serious fighting and abuse. Possibly the compound requires a certain balance in terms of the genders and ages of its residents, and it might favour some women with children who have suffered abuse and need shelter. It might be that two or three of the residents stay home to watch over the younger children during the day, and that they are financially supported by others who work outside the compound or by the state. One could suppose that there is a collective area where all children do their homework, or that there is a compound rule that no one may play outside until her homework is done, or that television broadcasts are turned off between 16.30 and 19.00. It could be that the parents meet together every two weeks to talk about parenting issues or matters of collective concern regarding the compound, or that they listen to social workers and child psychologists during this time.

The biggest problem with this suggestion is cost, or rather scope. It would take space to host these kinds of developments, which would not easily work in large apartment buildings. The numbers of people who could be involved, at least initially, would not be great. However, if the idea caught on, then developers would likely construct them without state involvement.

Furthermore, it could be that the benefits of living in such a communal arrangement would help reduce financial burdens that the state would otherwise face; one would expect adults to be less stressed and depressed and the young to do better in school and to be better socialized.

Case studies of successful recommendations

(This section is comprised of edited selections from Alkire et al. 2013, pp. 20-28). The previous section put forth ideas that have not yet been systematically tested, but that realistically could and should be. In contrast, this section discusses two practices that exemplify good governance that have already been executed, and with apparent success.

Public sector information: open government data

Suppose that an agency tries to provide rainfall projections for the coming season to small-scale farmers in southern Africa. However, in each country, the weather bureau charges high fees to access the information and protects against re-use with a copyright agreement. In such cases, it becomes costly to provide information that is vital to the wellbeing of citizens. Wealthy countries also face this problem. Before a recent EU directive, for instance, neighbouring countries could not make plans to deal with common issues, such as flood prevention, because their national geographical databases did not line up.

Although it has always been an important resource, in the 21st century information is one of the most important goods in our lives. Governments are the biggest single producer and owner of information. They collect, curate and store public sector information, which is typically used for their own purposes, but which could and should be used for more. Kenya, the United Kingdom and the United States have created powerful governmental portals that provide access to well-organized, digitized information. The material is licensed under (or based on the license of) a Creative Commons License, which means it is available under a free, perpetual licence without restrictions beyond attribution. Such information is called 'open data'. All three countries provide open data on issues such as: population; local and national government expenditure; public health and hospital locations; education, e.g., enrolment rates and school locations; parliamentary proceedings (digital Hansard); the weather; and residents' access to electricity, water and sanitation.

Is the Internet a prerequisite for open government data? No, definitely not. Public sector information can be provided free of charge and without copyright restrictions through a number of different media, including radio, print, television and mobile platforms, such as MXit. One example of non-Internet open data is in the Kerala state of India, which compels village councils and local government to publish their monthly expenditure on a public notice

outside their office: this is both free to access and re-use. More ubiquitous examples include national meteorological offices that publicize weekly or daily weather forecasts via conventional media.

However, the only medium that can handle large amounts of pure raw data is the Internet. In the United States, open government data placed on the Internet was strongly driven by Barack Obama when he was a senator. His headline achievements included the Coburn–Obama Transparency Act, which established USAspending.gov, a search engine on federal spending. Following a period of research and development, data.gov was launched in 2009 after Obama was elected as President. This high-level political will was coupled with impetus from a small and influential community of 'civic hackers', who worked independently and often without financial reward to repurpose government-created datasets in order to enrich civic life, or address particular problems of a civic nature, such as democratic engagement. For example, in 2004 Josh Tauberer launched GovTrack.us, which repurposes publicly available data about key activities of the US Congress and publishes it in an accessible, searchable form.

A meta-analysis of empirical research on open government data found that the majority of research supports the view that public sector information benefits the economy most when it is free to use and redistribute (Weiss, 2002). These benefits far outweigh the immediate perceived benefits of aggressive cost recovery, since paywalls and copyright restrictions retard economic activity substantially, particularly because demand for information is generally very price-sensitive. Moreover, the Weiss report also indicates that open government data may be more fiscally beneficial to government programs than cost recovery because more applications built on open data can translate into higher corporate taxes for the government.

Public sector information already exists; it's already been paid for; it's about the public and it belongs to the public. Government data is a valuable resource for users outside government. Making it open means more people can benefit from it, in more ways than the government alone can think of or support. At the same time, it is a public good: consumption of information by one individual does not reduce the availability of the information for others. This is why the benefit of information can extend far beyond its initial purpose. As a major producer of information, governments are in a strong position to spur innovation by promoting open data.

Open data can foster a more transparent relationship between citizens and government, and between citizens and citizens, which is good in itself. In addition, corruption in the public and private sectors appears to thrive on

secrecy. It is increasingly believed that the more transparent a government is to itself and the polity, the less likely it is to be corrupt. For instance, a qualitative study of the efficacy of anti-corruption programmes in Kenya between 1994-2002 found that the single biggest obstacle to countering corruption was the way in which informal centres of political patronage were hidden from public sight (McAntony, 2009). And, finally, consider that the free flow of information is a significant, constitutive factor of deliberative democracy. As citizens improve their understanding about their context – its social, political, economic and ecological dimensions – the quality of public reflection about which policies are just should also improve.

 How governments choose to develop and exploit this national resource is up to them and should be a matter of responding to their specific contexts. However, an important component of doing so is creating a tailored policy to deal with public sector information, which sets outs minimum norms and standards for the creation, curation and provision of data. In the mid-long term, governments may seek to establish a central data portal and data management agency, with well-trained and qualified staff, depending on their resources and context.

Minimizing prisons: restorative justice

Good governance is not just about developing the right laws and policies and implementing them effectively, but also responding in the right ways when they are contravened. Nearly 11 million people are held in penal and detention institutions across the world, and both the number and proportion of prisoners is growing in most countries. Prisons as a method of punishment are a relatively new phenomenon, arising largely from Benthamite principles in England in the 19th century and spread to the rest of the world through colonization. They are expensive, and their efficacy at crime prevention is highly questioned.

For instance, in 2012, the United States prison population was estimated at over 2.3 million prisoners. This means that 1 in every 100 American adults is currently in a prison, at a total estimated operating cost of $74 billion per year. Yet, experimental research shows that a criminal record in the United States constitutes a major barrier to employment, and helps explain the phenomenon of repeat offenders – rather than prevent crime, prisons may engender and institutionalise it. In addition, the broken homes caused by the imprisonment of fathers likely result in poor socialization of children and hence more criminality. Restorative justice represents a forward-looking approach to crime. Rather than seek to exact retribution on perpetrators, it seeks to rehabilitate them and to restore dignity and wellbeing to the victims of crime and their families.

Restorative justice programmes enable the victim, the offender and affected members of the community to be directly involved in responding to the crime

and repairing the injuries it caused. Such programmes can become central to the criminal justice process, with governmental and legal professionals serving as facilitators of a system that aims at offender accountability, reparation to the victim and full participation by the victim, her family, the offender and the broader community. The restorative process of involving all parties – often in face-to-face meetings – is a powerful way of addressing not only the material and physical injuries caused by crime, but the social, psychological and relational injuries as well.

Restorative justice has strong cultural and theoretical roots outside of European cultures. For instance, it is a central feature of sub-Saharan moral perspectives according to which individuals' humanity is a function of prizing harmonious relationships with others (Tutu, 1999). Where harming another is not necessary to prevent harm, doing so is thought to make one less of a real person. Living a genuinely human way of life means sharing a way of life with others and caring for their quality of life, even the lives of offenders who have failed to live that way, supposing they are no longer a threat. A consequence of this perspective is that crimes dehumanize both victims and perpetrators, such that both parties are in need of healing.

While restorative justice programmes can complement conventional penalties, their most important role has been in supplanting and precluding prison sentences. The number of such programmes has been growing, and there are now hundreds of examples across the world. The Sherman and Strang (2007) report, a review of randomised controlled trials on the effects of restorative justice (RJ) mainly in response to property and violent crimes (excluding sexual and domestic violence) in urban parts of the US, the UK and Australia, found that in comparison to CJ, RJ tended to:

• reduce crime victims' post-traumatic stress symptoms and related costs;
• provide both victims and offenders with more satisfaction;
• reduce crime victims' desire for violent revenge against their offenders;
• reduce the costs of criminal justice, when used as diversion from CJ;
• reduce recidivism, at least when there is a personal victim.

In light of the above, governments could develop evidence-based restorative justice programmes to complement and eventually supplant retributive justice programmes. Sherman and Strang say that the evidence on RJ is far more extensive, and positive, than it has been for many other policies that have been rolled out nationally. They contend that RJ is ready to be put to far broader use, perhaps under a 'Restorative Justice Board' that would prime the pump and overcome procedural obstacles limiting victim access to RJ. Such a board could grow RJ rapidly as an evidence-based policy, testing the extent to which RJ

reduces crime, and advertising the benefits of 'restorative communities' that try RJ first.

Implementation and monitoring

Although it would be nice for institutions to take up these kinds of suggestions on their own, it is reasonable for 'outsiders' such as those from the United Nations to try to get things started. This report should not merely be presented to the UN General Assembly for consideration; it should in addition be considered whether existing or forthcoming agreements, e.g., the UN Global Compact, the International Covenant on Economic, Social and Cultural Rights, or a post-MDG settlement, might bind states, firms and other organizations to adopt some proposals related to good governance, either as newly affirmed goals or as useful means toward ends they already recognize.

Regardless of whether a state has agreed or is otherwise bound to adopt some of these ideas, getting them to do so would usually require meeting with leaders in government and other institutions to lobby, request, and cajole. Advocates of these projects should find ways of speaking directly with officials from certain governments that might be interested and able to showcase successes. For instance, South Africa has a National Planning Commission, responsible for identifying social challenges and suggesting ways to deal with them to government and the broader society, and South Africa's National Department of Arts and Culture has a Social Cohesion campaign. It would be of interest to see whether political actors involved in such projects would commit to promoting some of these aspects of good governance, and exemplify good governance in the process of doing so!

In terms of ease and time-frame, some of these ideas could be implemented pretty much overnight, e.g., a firm's board could of its own initiative decide to change the required composition of its members and appoint accordingly, and a monarch can of course elect to consult with a certain group of advisors. Those who volunteer in these ways could be publicly tracked and honoured by the United Nations.

However, many of these suggestions would take longer and require substantial skills and other resources. For instance, overseeing the construction of child-rearing compounds and coordinating input from a variety of agents to construct libraries would require organizers who are articulate, literate, persuasive, creative, dedicated, responsible, pro-active, and perhaps even willing to fund-raise. Such people are comparatively rare, and they can be expensive to hire and hard to keep. However, the work, of helping to improve people's lives, would itself improve their lives, and the projects would be designed to be ones in which good outcomes are likely and visible.

In addition, there would often be political hurdles to overcome for the projects relating to decision-making by legislators and sentencing by judges. Sometimes legislative bodies have laid down penalties for particular crimes, which laws would need to be repealed for restorative justice projects to go forward. And in some cases constitutional law might need to be changed so as to require consensus or supermajority among elected representatives. In these cases, smaller countries should be approached to pilot such programmes, and, if they are successful, consideration could then be given about how to scale up to larger ones.

In terms of acquiring information about degree of success, Bhutan's GNH poses questions to citizens, e.g., about whether they judge themselves to have political rights, whether they have access to electricity, and how they perceive overall service delivery (Ura et al., 2012, pp.25-28). However, there are several dozen indices used across the world to choose from (canvassed in Besançon, 2003), many of which also appeal to people's judgment. Probably most well-known is Transparency International's index of perceptions of corruption in various countries. And there is also the World Bank's index that is based largely on surveys of citizens', firms', officials' and activists' opinions about the quality of their states. Its Worldwide Governance Indicators capture six elements of desirable political features, namely, voice/accountability, stability, effectiveness, regulatory quality, rule of law, and control of corruption. The World Bank was principally motivated to construct this index because of evidence that these elements of good governance tend to reduce poverty and related forms of economic disadvantage.

For some of the proposals, other kinds of assessment could be used that do not rely so much on people's 'subjective' opinions. Objective evaluations might be more politically persuasive, if not also more scientifically accurate. For instance, with regard to the education project, it would be easy to quantify how many libraries, say, resulted from the state's effort to include and coordinate the efforts of various actors. In addition, it would be of interest to know about not merely the 'outputs', but also their 'outcomes'. What goods have resulted from the provision of libraries, viz., are children in fact reading more or better? Such questions could be answered by standardized tests that one presumes are already being administered. Similarly, with respect to the project of extending families, one could quantify the amount of time in which children were playing with other children or being looked after by an adult, as opposed to spending time alone or in front of a television, and that could be compared with families not residing in compounds. Success could also be measured by the level of demand to get into the village, e.g., by how long waiting lists are or how many applications there are for a given opening.

An actual example of a more objective measurement of governance, albeit one that focuses mainly on the presence of bad governance, is the Failed State Index (FSI), compiled annually by a non-profit, non-partisan organization and made freely available. It ranks all nations of the world on a scale from 'critical' to 'stable' based on electronically available reports, studies, and articles. It evaluates states in a dozen key areas, looking at an average of ten variables in each area, and then summing them all in a single score. FSI looks at some markers of governance that the GNH does not, e.g., phenomena such as the presence of factionalized elites more interested in partisan advantage than social wellbeing, demonization of outgroups, demographic pressures on resources, presence of internally displaced persons or cross-border refugees, etc.

Finally, consider some regional mechanisms that have been used to measure governance without primarily appealing to people's perceptions. For one, there is the Arab Human Development Report commissioned by the United Nations Development Programme, which has been written by leading intellectuals and academics from the Arab world. For another, the African Union has used a Peer Review Mechanism by which member states evaluate the quality of one another's political governance based on a self-assessment report, background research conducted by experts, and a wide range of consultation. These are more qualitative studies and recommendations, and not so much 'scorecards' that would admit of, say, a comparative ranking.

Conclusion.

This chapter has provided an analysis of good governance, one of the nine domains of GNH. It began by posing questions central to reflection about the topic, and then indicated that good governance should not be reduced to a merely instrumental consideration and is also reasonably taken to be good in itself. The chapter then noted respects in which political governance was typically less than ideal in the 20th century, after which it sketched a broad strategy for making governance better, roughly, by having citizens participate with their government to provide positive opportunities to enrich their lives while minimizing the use of coercion. Then, the chapter presented several examples of ways that states and other organizations in a wide array of socio-political settings could exemplify desirable forms of governance, and it also posited a number of mechanisms by which to implement and monitor these proposals. Although good governance may well be good for its own sake to some degree, chances are that those sympathetic to advancing GNH should focus initially on this domain as a necessary step to the eventual realization of the other eight.

References

Alkire, S., 2013. *Wellbeing, Happiness, and Public Policy*. Thimphu: The Centre for Bhutan Studies.

Alkire, S., Barham, A., Hoffmann, N., Kim, J. and Ura, K., 2013. *A Map and an Atlas: 65 Case Studies and Innovations.* Thimphu: The Centre for Bhutan Studies.

Besançon, M., 2003. *Good Governance Rankings: The Art of Measurement*. Cambridge, MA: World Peace Foundation.

Bujo, B., 1997. *The Ethical Dimension of Community*. Nairobi: Paulines Publications Africa.

Hirata, J., 2013. Gross National Happiness, Ethics and Democracy. In: The Centre for Bhutan Studies, ed. *Background Papers by Distinguished Authors on Public Policy Recommendations for Happiness-Based Development Paradigm.* Thimphu: The Centre for Bhutan Studies: 227-237.

McAntony, T. S., 2009. *Public Sector Management Reforms in Africa: Analysis of Anti-corruption Strategies in Kenya*. PhD Thesis, Syracuse University. http://surface.syr.edu/socsci_etd/9/.

Metz, T., 2009. African Moral Theory and Public Governance. In M. F. Murove, ed. *African Ethics: An Anthology for Comparative and Applied Ethics.* Pietermaritzburg: University of KwaZulu-Natal Press: 335-356.

Sherman, L. and Strang, H., 2007. *Restorative Justice: The Evidence*. London: The Smith Institute. http://www.restorativejustice.org.uk/resource/restorative_justice_the_evidence__professor_lawrence_sherman_and_dr_heather_strang/.

Tutu, D., 1999. *No Future without Forgiveness*. New York: Random House.

Ura, K., Alkire, S., Zangmo, T. and Wangdi, K., 2012. *A Short Guide to Gross National Happiness Index*. Thimphu: The Centre for Bhutan Studies.

Weiss, P., 2002. Borders in Cyberspace: Conflicting Public Sector Information Policies and their Economic Impacts. http://www.nws.noaa.gov/sp/Borders_report.pdf.

Wiredu, K., 2000. Democracy and Consensus in African Traditional Politics: A Plea for a Non-party Polity. Polylog 2, http://them.polylog.org/2/fwk-en.htm.

Chapter 15: Community Vitality

— Ronan Conway, Ilona Boniwell and Thaddeus Metz

Domain description: community vitality

A definition of community forwarded by McMillian (1976, as cited in McMillian and George, 1986) suggests that a 'sense of community is a feeling that members have of belonging, a feeling that members matter to one another and to the group and a shared faith that members' needs will be met through their commitment to be together' (p.10). Definitions of community are varied, but show three general characteristics: it is a social group, people in it have common activities and experiences, and it occupies a definite territorial area (Hoffer, 1931). This paper is mainly concerned with geographic communities of people living in villages and towns.

The concept of Gross National Happiness (GNH) incorporates the social capital of the country, that is, the quality of relationships among and between people of a country. This is sustained through social networks and co-operative relationships within the community. A community where groups of people support and interact positively with other individuals, and provide social support to one another based on a sense of cohesion among community members, is said to express community vitality. Therefore from a GNH standpoint, a community must possess a number of traits: strong relationships amongst the community members (including within families), the possession of socially constructive values, prosocial behaviours such as volunteering and donating time and/or money, and a safe environment from violence and crime (Ura et al., 2012).

Empirical studies identify the community to be one of the most significant determinants of wellbeing for individuals as well as families (Putnam, 1993; 2000; Field, 2003). Social capital also affects people's learning and health (Fujiwara and Kawachi, 2008). People who feel a sense of belonging tend to lead happier and healthier lives, and create more stable communities and a more supportive society. Social capital also has an instrumental value, as increasing evidence illustrates that social cohesion is imperative for societies to prosper economically and sustainably (The World Bank, 1999).

Therefore, it is only natural that a GNH society includes community vitality as one of the nine equally weighted domains. The indicators currently cover seven major aspects of community: 1) family vitality 2) perceived safety, 3) reciprocity, 4) trust, 5) social support, 6) socialization, and 7) kinship density.

Existing sub-domains

Family vitality

Central to the concept of GNH, and the sustainment of social capital, are the co-operative relationships and social networks within the family. A vital community can be described as a group of people who support and interact positively with one another, based on providing social support to one another. In turn, applied to the family context, family vitality may be based on the same pillars of support and positive interaction, sense of cohesion and inclusion.

The family context consists of a number of influences - family type (e.g., number of adults living in household), family processes (e.g., communication, inter-generational relationships, attitudes to family roles), individual characteristics (e.g., emotional reactivity), and family circumstances (e.g., life events, social class, hours worked etc). Family vitality encompasses all of these influences, and may be framed as the outcome of the dynamic interactions between these influences that provide support, positive interactions, and a sense of cohesion and inclusion.

A GNH society would consider family as one of the important determinants of an individual's wellbeing. According to Chophel (2010), when asked to indicate the importance of life priorities, "family life" was rated as the most important. Family life can also bestow health and behavioural benefits, as good family relationships are vital for the health of family members as well as community members (Chophel, 2010). In addition, relationships formed within the family act as a positive force, particularly in a young person's life. Family vitality is also likely to influence, and be influenced by, individual vitality, as vital persons "often infectiously energise those with whom they come into contact" (Peterson and Seligman, 2004, p.273).

Family vitality is an important component of social capital, and therefore community vitality, as it encourages growth and development amongst family members through avenues of healthy family communication, family bonding, and goal commitment. Therefore, a GNH society would strive to develop a society where families are a source of encouragement for growth and development, support, cohesion and inclusion.

Safety

Feeling safe and secure at home, work and in the community is an essential prerequisite for sustaining a good quality of life. From an attachment perspective, perceived safety in child and adult relationships allows a foundation for exploration and learning (Bowlby, 1969; Green and Campbell, 2000). In terms of social space, the neighbourhood is a critical environment for

youth development (Parke and O'Neil, 1999). The perceived safety of a community has a number of effects on wellbeing at both an individual and social level. For example, perceived lack of safety is associated with negative individual outcomes of anxiety and poor health outcomes and is listed by Statistics Canada as an actual "determinant of health" (Middleton, 1998; Macintyre and Ellaway, 2000). At a social level, individuals' sense of neighbourhood safety is related to the extent to which they participate in and interact with their community (e.g., Sampson, 2003; Baum et al., 2009). Higher levels of safety and supportive neighbourhoods are associated with perceptions of better health outcomes, more social cohesion, and stronger connections with family, peers and community (Wen, Kandula and Lauderdale, 2007; King, 2008; De Jesus et al., 2010). Thus, a safe community is a significant context for community vitality as it promotes individual health and wellbeing, social relations, and community participation.

Reciprocity

Reciprocity can be defined as "being the equality of perceived investments in and out from a relationship relative to the person's own internal standards" (Pritchard, 1969, p.180). People pursue a balance between what they 'invest' in a particular relationship (e.g., time, skills), and what they receive in return from it (e.g., appreciation, self-esteem). As people give help, resources and affection to others, the abiding norm in social ties is that sooner or later, the receiver will help the giver (Gouldner, 1960). This expectation of reciprocity can facilitate the maintenance of social stability and promote individual wellbeing (Verbrugge and Chan, 2008). As an important note, however, we must acknowledge that reciprocity as considered here is quite different from the Buddhist approach and the notion of Bodhisattva activity, which is based on giving without expectation of any reward or anything in return – i.e. generosity in its own right.

Research shows that being part of a reciprocal exchange of support is related to higher life satisfaction compared to predominantly received help. In contrast, failed reciprocity resulting from a violation of this norm elicits strong negative emotions and sustained stress responses because it operates against this fundamental principle. For example, lack of reciprocity in work relationships is associated with a range of negative health outcomes including work burnout, depersonalisation, lack of personal, accomplishment, depression, alcohol dependence, and risk of heart disease (Siegrist, 2005). Lack of reciprocity is also damaging to social relations, which in turn has a detrimental effect on the social cohesion and social capital of a community.

Reciprocity can occur at an interpersonal level (i.e., couple relationships), or at a social-level (e.g., between community groups). In order to maximize interpersonal and intergroup relations, and subsequent community vitality, a

GNH society would certainly strive to cultivate a social norm of reciprocity within the community to promote community wellbeing and happiness.

Trust

Trust has been espoused as the 'glue' that holds society together (Luhmann, 1988) as it is important for wellbeing at both an individual and societal level. Trust encompasses an individual's belief that, at worst, others (individual or institutional) will not knowingly do them harm, and at best, that they will act in their interests (Newton, 2001). The notion of trust is inseparable from social capital, as to trust others, is to accept the risks associated with the type and depth of the interdependence inherent in a given relationship (Shepard and Sherman, 1998). These relationships include relationships between individuals and social systems.

The fundamental role of trust in a GNH society is to promote effective interpersonal relationships and community living. According to research, trust is imperative for the smooth functioning of society, and in turn, important for the development, maintenance, and sustainability of wellbeing (Meyer et al., 2008; Ward and Meyer, 2009). Trust not only makes it possible to maintain stable social relations, it forms the basis of collective behaviour and productive cooperation. For example, higher levels of political trust have been associated with increased likelihood of paying taxes (Scholtz and Lubell, 1998). Trust can also indirectly influence individuals' wellbeing, as trust can impact individuals' access to, and utilization of, services (e.g., health services; Ward and Meyer, 2009). Access to such services can in turn promote increases in wellbeing.

The link between trust and wellbeing is particularly strong for workplace trust (Meier and Stutzer, 2008; Powdthavee, 2008). For example, Helliwell and Huang (2011) explored two Canadian surveys and one US survey, finding that an increase of trust in management that is about one tenth of the scale is equivalent to more than 30% increase in monetary income. In addition, Helliwell and Wang (2010) found that among all the trust measures, having a high trust in co-workers has the greatest effect on subjective wellbeing, being associated with a 7.6% higher life satisfaction. These results show the importance of workers and managers paying more attention to workplace trust. By doing so, they may help to increase not only company profits, but also the quality of social relationships in the workplace and, therefore, in their communities. These actions may lead to higher levels of community vitality, and therefore, on a wider basis, to increased happiness and wellbeing among countries. Thus, the private sector may play a key role in improving community vitality through developing the right policies aiming increasing trust in their organisations.

Similar to values of reciprocity, trust is essential for the functioning of a happy society at an interpersonal level and at an institutional level. A trusting community, where principles of cooperation exist, is likely to develop aspects of social capital and social cohesion that are the foundations of community vitality.

Social support

Social support has been broadly defined as resources (e.g., emotional, instrumental, and financial support) provided in the context of a relationship, like having someone to turn to in time of crisis, or just having someone's in your life who makes you feel loved (Cohen and Syme, 1985). In terms of community social support, it may be reflected by the provision of support by volunteering or donating to an individual or a community. It is relevant to all spheres of life and without a doubt has a positive impact on a wide range of social, economic, cultural and environmental issues, including physical and mental wellbeing. It is understood that connectedness in a community is depicted in the strength of social networks within communities (Ura and Zangmo, 2008), and it is prosocial behaviour such as volunteering and donating that encourages interactions between people and strengthens community connections. Involvement in volunteering and donation activities generates social capital, which creates a healthier and more vibrant community. Besides these numerous benefits, it is also crucial for creating true partnerships between the different members of the community, business, NGOs and the government.

The giving of time and money - volunteering and donating – is a traditional practice in Bhutanese and other societies. These practices may have been more wide spread in previous eras, because remote communities depended on each other for survival. At the same time, commercialisation, as well as working longer hours (as further highlighted in the chapter on time use), may devalue such traditional values which may lead to their decline. So it is vital to include these indicators, to assess the level of social support in a community and its trends across time.

Socialization

The importance of socialization, that is, the possession of skills and habits necessary for participation within society, cannot be overstated. Socialization refers to the "means by which social and cultural continuity are attained" (Macionis, 2010, p.104). Through this continuity, norms, customs, and ideologies are maintained over time. This creates a social stability which is necessary for wellbeing to develop. While cultural variability is expressed in the behaviours and customs of entire social groups (societies), it is at an interpersonal level that the most fundamental expression of culture is found. This is through interpersonal interactions that are fundamental for people to develop, grow and flourish. One feature of how the continuity of values is

attained is through a sense of belonging. Establishing and maintaining relatedness to others is a pervasive concern for humans (Kohut, 1977). Maslow (1962) proposed that the need to belong must be satisfied before other needs can be fulfilled. Thus, a sense of belonging is vital to participation in society and developing wellbeing. Research on emigrants shows that they report less life satisfaction than natives, even when several demographic factors are controlled for, because they have had to leave their networks of friends and family. Furthermore, the absence of a sense of belonging may lead to loneliness, alienation, hopelessness, and poorer psychological functioning in general (Hagerty et al., 1992; Hagerty et al.,1996).

Thus, socialisation and its influence on human relatedness and cultural continuity are paramount in order to create a GNH society with a vibrant community.

Kinship density

Kinship density refers to the number of social relationships that an individual possesses. In particular, it considers social relationships between those who share a genetic relatedness (descent) or kinship through marriage (affinity).

The role of kinship in building social structures can be seen throughout history. Much research on the role of kinship has used animal studies, where patterns of social organisation have been studied in relation to cooperation (e.g., altruism) and conflict (e.g., selfishness). Familial networks engage in complex collaborations, involving mixed groups of close and distant relations, where benefits are preferentially channelled to kin (Griffin and West, 2003). Saying that, kinship functions at many levels and in complex concentric circles of connectedness, so in some cases kin relations may not have instrinsic value per se, but instead may be temporary, fluctuating, and instrumental depending on where perceived threats reside.

Research has also illustrated that the magnitude of group cooperation will vary with the degree of relatedness within the group (Krupp, DeBruine and Barclay, 2008). Cooperation between individuals is an important requisite for the maintenance of social relationships. Thus the formation of cooperation within familial networks may lay the foundation for further cooperation within social relationships outside of the family network, thereby increasing community vitality. Indeed, familial networks may be related to the urban – rural divide in community vitality. This is because social networks in rural areas are denser, more kin-based, and may provide more non-material support than urban areas (Fischer, 1982). This may also be linked to social stability. In a study comparing city dwellers with those who lived in suburbs, no difference was found in wellbeing levels due to area of residence, while length of residence has the

strongest effect on neighbourhood social ties and participation in local activities (Adams, 1992).

Alternative sub-domains for consideration

Meaning in life

Professional philosophers often draw a distinction between meaning in life and the meaning of life (Seachris, 2012). The former concerns a desirable, higher property that an individual person's life can exhibit to a certain degree, whereas the latter is a feature of the human species as such or of the universe, for example, a source of these wholes (say, having sprung from God) or a pattern they could exhibit (developing toward a telos). In proposing that recent philosophical reflection should have an important bearing on public policy, this sub-domain addresses solely in meaning in life.

When speaking of 'meaning in life', many are referring in large part to self-transcendence, that is, the eudaemonist or active understanding of wellbeing that is distinct from the hedonic or affective interpretation. Much of what people have in mind when thinking about a life's being meaningful is an individual 'realising their true self' by actualizing their capacities in the service of something 'greater' than themselves.

However, what can make one's life meaningful is not exhausted by self-realisation. Meaning in life could come from conforming to God's will or being a part of a religious community (rather than seeking out trivial satisfactions from the marketplace), or experiencing natural beauty and wilderness (rather than just concrete, Styrofoam and pollution), or residing among old, hand-worked crafts and once-off architectural constructions (as opposed to new, mass-produced works), or understanding oneself and learning to take responsibility and to delay gratification (as opposed to 'running on auto-pilot' and being 'flighty'). Such cases suggest that talk of 'meaning in life' signifies not merely self-realisation, but also pursuing highly worthwhile goals besides one's own pleasure, positively connecting with final goods beyond one's animal self, and living in ways that merit substantial esteem or admiration, thereby contributing to one's community in its larger sense (Seachris, 2012).

Community change

Many perspectives on community have moved beyond the notion of 'stability' as anything more than historical artefact (Grigsby, 2001). Change is becoming a feature of many communities, particularly as community connections with the broader, 'outside' world expand (whether through technological advancements etc.) and intensify. Vitality in this sense may refer to the collective capacity of communities to respond to change, especially economic change (Grigsby, 2001).

Other terms that may be synonyms for community change are 'sustainability,' 'community resilience' and 'adaptability'.

Authors have addressed the sorts of resources and capacities hypothesized to enhance a community's ability to respond to changing conditions. These include development of human capital (workforce skill development, leadership, decision making capacity, entrepreneurship), physical capital (health care, education and information technology infrastructure, affordable housing), social capital (capacity to 'network,' establish partnerships both within and outside of the community), and natural capital (sustainable, diverse and economically viable use and development of agricultural and natural resources). Emphasis on change also suggests community vitality as a concept that implies both structure and process (Grigsby, 2001). Measuring the ability of a community to change may be useful in order to assess the sustainability of community vitality in an area.

Equality

A high level of community vitality requires mutual respect between society members. However, it is difficult to achieve when there are massive income inequalities (Layard, Clark and Senik, 2012). Research shows that higher inequalities are associated with lower life satisfaction, even after controlling for income, personality traits and several other important characteristics (Alesina, Di Tella and MacCulloch, 2004). A plausible explanation for this relationship is the fact that the scale of income differences has a powerful and direct impact on how we relate to each other, leading to increased social tensions and, therefore, to lower wellbeing for both rich and poor citizens (Wilkinson and Pickett, 2009). Therefore, equality (other things being equal) is desirable for two reasons (Layard, Clark and Senik, 2012). First, the value of additional income is higher for the poor than the rich. Second, greater income inequalities may increase social tensions, thereby reducing social capital, and therefore also community vitality and subjective wellbeing.

Thus, government may play a key role in promoting income equality. For instance, research results strongly support redistribution income policies through several mechanisms such as increasing tax rates, subsidies to poor people and so on.

Unemployment and job stability

The issue of unemployment is of relevance for more than one domain of the GNH, including the living standards, time use and psychological wellbeing. The main impact of unemployment on happiness goes well beyond the loss of income (Stiglitz , Sen and Fitousi, 2010). It produces a loss of social status, self-esteem, workplace social life, confidence, and diminishes other factors that

matter for a good quality of life (Layard, Clark and Senik, 2012). Unemployment also produces detrimental effects for family members, but also for communities in which people reside (Diener et al., 2009). For instance, Catalano et al. (1993) found that unemployment contributes to the increase of violence in communities. These results highlight the importance of having public policies in place that focus on increasing job stability as well as promoting meaningful dignified occupations for unemployed community members.

Intrinsic value of community vitality

Living in, participating in, and contributing to a community that is full of vitality, that is, is supportive and engaging, is often argued to be an 'end-in-itself'. Feeling part of a vibrant community with supportive relationships, friendships, peace, creativity, and safe spaces for discussions, is good in itself. Having a sense of place, knowing that you may explore the world with a continual sense of appreciation, wonder and awe, are sufficient outcomes in and of themselves to aspire to in a GNH society that encourages community vitality.

However, it is only when people have their basic needs of autonomy, relatedness and competence met can the value of community vitality be developed. Community relations can also restrict all of these needs through being oppressive, unfair, and forcing people to flee to more anonymous environments. This is especially true in societies where women are oppressed (and even physically abused or worse - unfortunately honour killings are usually family affairs). Therefore not all community belonging is "good in itself" and can only be considered as such if a community fosters freedom and realisation of human potential, etc. rather than the reverse.

Extrinsic value of community vitality

A number of benefits have been associated with social capital, a hallmark of community vitality. This includes enhanced health, better educational outcomes, improved child welfare, lower crime rates, reduced tax evasion, and improved governmental responsiveness and efficiency (Productivity Commission, 2003). In addition, having an active, supportive community is instrumental to many types of support. For example, in terms of social support, if someone falls ill, others will take care of them. Likewise, if individuals lose their jobs, others will support them through it. In terms of the most vulnerable, a vibrant community will be creative, vocal advocates of social equality, ensuring that the most vulnerable (e.g., intellectually disabled) will be afforded every opportunity and resource to maximize active participation in society. Such fairness and equality throughout a community would encourage trust at both individual and institutional level, facilitating good governance. At an individual level, a vibrant supportive community would encourage the spiritual growth and development of individuals, and allow the process of self-

actualisation, where one can fulfil their potential and experience flow. Research has shown that personal growth is linked to openness to experience, a component of self-actualisation (Schmutte and Ryff, 1997). Components of community vitality, such as community trust, have been found to be more important to happiness than household income (World Happiness Report, 2012). In terms of social capital, well-connected people are less likely to experience illness, depression or unemployment, and are more resilient, therefore being less likely to draw on the publicly funded health and welfare systems. The act of developing or joining a social network or group also provides benefits to other members of the group. Furthermore, people who are satisfied with their community, also report higher levels of happiness.

When it comes to meaning as one of the potential sub-domains of community vitality, recent work in psychology suggests that believing that one's life has meaning is associated with: greater levels of a variety of positive feelings such as hope and satisfaction; better physical health and general wellbeing; lower levels of stress; lower levels of drug addiction and dependence; and reduced incidence of depression (for summaries of this research, see Baumeister, 1991; Crescioni and Baumeister, 2013). Of course, there is some variation among different societies and communities about what counts as meaningful, the good, the true and the beautiful. However, there appears to be an 'overlapping consensus' among large and long-standing traditions (Christian, Islamic, Hindu, Chinese, African, secular). Given that intelligence directed toward improving others' lives, thinking about the world and one's place in it and making one's environment attractive to the senses is indeed valued by (nearly) all cultures, and given that people can reliably tell when they have exhibited such behaviour, people's reports of meaning in their lives are probably fairly accurate. Furthermore, it appears plausible that human beings are fundamentally motivated by an interest in meaning, e.g., in judging their lives to be worthy of esteem (Becker, 1971) and in helping others, particularly the next generation (Aubin, 2013). If we are not merely egoistic pleasure seekers, in the way that animals characteristically are, but pride and prestige seekers as well, then it is likely that those who achieve the goal of an estimable life will tend to be better off in additional ways than those who fail to do so.

To conclude domains of GNH in increasing the happiness and wellbeing of individuals and societies.

Traditional public policy

The traditional public policy approach to promoting wellbeing of neoliberal Governments is that, "wellbeing" is ultimately the responsibility of the individual (Ward and Meyer, 2009). In terms of promoting wellbeing within and across society, many people have argued for some level of State

intervention (e.g., Navarro, 2002). The central problem lies in the tension between the pursuit of health and the pursuit of wealth. According to political economists, because the capitalist system is based on the production and consumption of material wealth, it cannot also promote the 'production of health' in an equitable manner (Ward and Meyer, 2009). An example is the increase of risks in contemporary society as a bi-product of industrialisation, such as increased stress due to the increased pressures on workers. In response, others have maintained that the capitalist system needs workers and therefore needs to maintain and sustain the health of workers (Ward and Meyer, 2009). However, even in this perspective, the role of the individual in creating economic capital is prioritised over the interpersonal connections that facilitate the health and wellbeing of a community.

Notwithstanding this, due to the perceived increase in social problems, there have been increasing calls to co-ordinate a policy response to arrest the deterioration of society. At the heart of community vitality is social capital, as it is associated with social and civic participation, networks of cooperation, social cohesion, trust, reciprocity, and institutional effectiveness.Basic needs-enhancing social capital is proclaimed as an unqualified "good". Social capital can be distinguished into three approaches; the micro-level approach which emphasises the nature and forms of cooperative behaviour; the macro-level approach which highlights the conditions for cooperation; and the meso-level approach which focuses on structures that allow cooperation to take place (Franke, 2005).

Major approaches to social capital have taken a variety of positions. For example, the World Bank's approach to social capital was based on the importance of contextual factors as determining collective action (Grootaert and van Bastelaer, 2001). This perspective combined micro (e.g., individual predispositions that perpetuate poverty), macro (e.g., the structure and activities of local groups) and meso (e.g., elements of the local context that facilitate or impede collective action) components of social capital. In contrast, the Organisation for Economic Co-operation and Development (OECD) adopted a macro-level approach to social capital, viewing it as an end result rather than a resource input. Four major indicators of social capital were used; social participation, social support, social networks, and civic participation. This is similar to the approaches taken by the United Kingdom and Canada (Franke, 2005). In Australia, a global approach to social capital is used, based on four major types of assets: natural, economic, human, and social (ABS, 2004).

In reality, governments already carry out a number of actions that may support or enhance forms of social capital. For example, the provision of basic systems of property rights and civic order are often preconditions for the emergence of

generalised trust. In addition, many government programmes in areas of welfare, education, family support, community services, sport and arts, and the delivery of essential services, are often implicitly aimed at developing social capital (Franke, 2005). Government has also played a major role in the growth and expansion of the volunteering sector (Salamon, Sokolowski and Haddock, 2011).

While such assistance has been successful in terms of economic development, infrastructure and quality of life in communities, this technical assistance may also limit community capacity (Cavaye, 2000). This occurs as some government approaches to "develop" communities using technical assistance can disempower local people, create dependency, and suppress local organisation and leadership (Cavaye, 2000). By focusing on "needs" rather than the assets of a community, public agencies can limit community mobilisation and social networks (McKnight, 1995). For example, previous research has illustrated how government programmes such as urban renewal and public housing projects have destroyed existing social networks within a community (Putnam, 1993). While Government assistance can create financial and physical benefits, other unintentional outcomes can occur. For example, government incentives and rezoning to create a meat packaging plant in a small rural US community created jobs for local people. However, high employee turnover diminished social capital, while crime and insecurity increased (Flora and Flora, 1995). In summary, government intervention can 'crowd-out' or inadvertently damage civil society and reduce personal and community reliance (Franke, 2005).

A number of barriers still remain in the traditional policy approaches to building social capital. For example, some authors emphasise that some sources of social capital are long-standing and, thus, may be slow or difficult to change (Fukuyama, 1999). While there may be greater scope for the short-term development (or loss) of trust and networks at the individual level, these individual opportunities are still constrained by prevailing community norms and attitudes, factors which are still generally slow or difficult to change.

Of particular relevance for policy makers, is that there is some disagreement about the role of government in social capital formation, whether it is damaging or enhancing. While social capital within a group will generally provide benefits to the members of that group, at a community-level, its translation into benefits for the broader community depends in part on the group's goals. In some cases, the achievement of group objectives may come at the expense of community wellbeing (Ostrom, 2000). Group behaviour can also have the effect of excluding 'outsiders' from roles and opportunities. At the individual-level, community or group participation can create demands for conformity, consequently restricting individual choices. For example, sanctions against the

education of girls in some developing countries, and the severe ostracism of members who disobey the norms of the Amish communities in the United States, illustrate the negative impact of social restrictions due to high social cohesion.

Major research findings of potential relevance to new public policy

A number of research projects have illustrated methods of increasing social capital and building the capacity of communities. These approaches take the OECD definition of social capital, and focus on networks of people, and their shared norms, values and understandings that facilitate cooperation within and among groups. One such approach is to increase the interpersonal relationships within and between groups by using information and communications technology (ICT). In a report from the Commonwealth of Australlia (2005), ICT was found to supplement social capital as individuals and organisations used ICT to extend their services and reach, thereby reinforcing existing relationships and creating and extending new relationships. Hoowever, this very much depends on how ICT is used, as it can also increase social isolation (more screen-time, less interpersonal time) and increase inequities (disadvantaging poorer groups without access to the technology).

Another policy approach geared towards enhancing the interpersonal networks of communities may include planning provisions. For example, in order to create a space for meeting, playing, and communal activities, provisions must be implemented in planning applications for open spaces, such as parks and reserves. For example, the OECD (2001) notes that, in Pistoia, Italy, the municipal council provides spaces for children's meetings, family activities, and community meeting points. This provides support for families not in need of full-time childcare. In addition, parents and other family members (e.g., grandparents, siblings), can attend enrichment activities at these locations, which serve to support both adults and children, and strengthen community ties. The same meeting places also provide after-school spaces for school-age children, and "educational resource centres" (OECD, 2001, p.68) for teachers of infants.

Another example of beneficial planning is illustrated in the UK, where anti-traffic measures promote safety in the residential street. For example, lowering speed limits and restricting vehicle access by non-residents provides spaces for children to play and encourages community connection (UKPIU, 2002). Such measures would be aimed at increasing perceived safety, and encouraging interpersonal connections in a community. However, this is likely to work better in a community with high social capital, as the maintenance and upkeep of public spaces would be a local responsibility.

Another approach to increasing social capital focuses on education. Participation in education is linked to economic development and is the basis for building positive values that characterise social capital such as reciprocity, trust, acceptance and cooperation. Social capital is also related to favourable educational outcomes such as higher retention rates and higher student achievement (ABS, 2002; Putnam, 2000). For example, a number of studies link the involvement of families, the community and the state to improved education outcomes. This is thought to work through the involvement of all of these levels encouraging a sense of community ownership, mobilising additional resources, and strengthening institutional capacity, which subsequently improves the relevance and quality of education. Lifelong learning is also an important aspect of education (Falk, Golding and Balatti, 2000). This taps into existing networks of people, and facilitates opportunities to develop new social networks and discuss important issues in the community. Adult and Community Education can promote lifelong learning, which has been identified as key in the development of flexible and sustainable communities (Falk, Golding and Balatti, 2000). In line with this, policy should be further developed to encourage education. This should incorporate values education that encompasses developing skills in interpersonal communication, culture, and diversity, in order to develop curiosity and appreciation of diversity, and trust (Hughes, Bellamy and Black, 2000). Others suggest incorporating volunteering into the school curriculum, as early experiences in volunteering appears to be highly predictive of community engagement in later life (UKPIU, 2002). In-school education could also be used to deliver aspects of the psychology of parenting, relationships and child development to enhance students' parenting skills for later life. This is based on evidence suggesting the important role of parenting practices and the social capital of parents for the development of children's capacity to form trusting relationships (UKPIU, 2002).

The Government and its structures also have a vital role to play in increasing social capital. As espoused by the OECD (2001), a commitment to public welfare, accountability and transparency provides citizens with a basis for trust and social inclusion, which subsequently increases social capital. Government and its agencies are ideally positioned to support the vitality of communities. A number of principles to achieve this are outlined by Cavaye (2000). These principles form the basis of a number of approaches to recasting the role of government interactions with communities; redefining the "real work" of public servants to a dual role of "delegation and community", where delegated work is achieved in a way that supports community networks, partnership and capacity; fostering relationships between community members and government workers by increasing the "networking" role of public servants in communities, initiating contact with diverse groups of people; introducing accountability for

the process with which government interacts with communities, and accountability for community capacity outcomes; and coordination between agencies based on valuing existing cooperation, common goals and values, and joint projects. This policy of a dual role of government agents is transferable across contexts. For example, in an Australian project aimed at building networks among rural women through access to communication technologies, a nominated person in each government department was available for contact by women in the network, providing these women with valuable linking social capital (Productivity Commission, 2003). In addition, granting citizen's participatory rights, including the use of 'citizen juries', in policy formulation may encourage community participation and trust in government (UKPIU, 2002). Thus, promoting a sense of equality, transparency, and accountability in themselves may increase the quality of political institutions, promote trust, and subsequently build social capital. A consequence of this approach is that government departments would have to go through a process of capacity-building in order to re-evaluate their role. In addition, a possible risk also includes the government being selective in dealing with certain community members over others. Costs regarding education and changing work-based practices are also likely to be incurred.

Recommendations

What not to do – Which actions/policies need to be stopped or modified so as to 'do no harm'

- An important facet to the efforts to develop and promote social capital within a community, is that government and public policy *cannot* build community vitality – this requires the engagement and by-in of individuals within and between communities. Any approach that may be viewed as heavy handed, manipulative, or imposing unwanted restraints on individuals are likely to be rebuffed.

- In addition, existing patterns of interaction between community participation and government organisations are likely to connect relatively small number of people. For example, relatively few people from a community are involved in government, or government agencies, and the few people involved in one setting are likely to be the same people involved in another (Skidmore, Bound and Lownsbrough, 2006). Therefore, encouraging the existing forms of community participation is likely to only ever engage a relatively small group of people. Other solutions must be put in place.

- Finally, now that social capital is being highlighted as important to individual and community wellbeing, it is important that a long-term

vision and commitment to developing community vitality is created. Policies and projects lead by short-term political agendas are likely to undermine and erode community trust in the long–term. A focus on, and commitment to, long-term community sustainability is paramount to building community vitality.

What to do

A lack of meaning stems from a number of large-scale institutional practices. Those who are unemployed feel that they are failing to contribute to society and to support their families, while those who are employed often sense that they are working too much and doing so at activities they do not find important. Those who are poor find themselves lacking resources to purchase goods they could deploy for meaningful projects (e.g., they cannot acquire books, or instruction, or artistic supplies), while those who are rich are surrounded by material objects but often lacking in human relationships. Those who are victims of sexism, racism and other forms of discrimination miss out on (often, substantial) opportunities, with the injustice reducing the meaningfulness of their lives, whereas those who benefit from such practices feel superior for misguided reasons, and the undeservedness of the privilege reduces the meaning it might otherwise confer. In general, less and less of life in modern societies is determined by communicative action among people, and is instead steered by the exigencies of bureaucracies, markets, technology and the flow of mass numbers of people (Fromm, 1955; Gorz, 1980; Habermas, 1984; 1987).

Major socio-economic changes that would address the above are not immediately forthcoming, and the right ones to make are often unclear. However, in their absence, the state could still adopt certain enabling strategies that promise to make a real difference. Here are some possibilities, many of which draw on the idea that people have a need to give and to contribute, particularly from their midlife years onward (Aubin, 2013). In so far as these are general prescriptions – advantages and benefits of the proposed policies need to be addressed (examples of existing case studies, evaluated projects and novel initiatives).

Take social capital into account in the development and evaluation of projects, programmes, and subsequent policies.

    a. This means recognizing the importance of networks and social connections, and their particular dynamics as resources for individuals and/or communities.

    b. This also means assessing direct and indirect influences that community projects, programmes, and interventions may have on community networks and resources. For example, anti-traffic measures implemented

to promote safety in a residential area, such as lowering speed limits and restricting vehicle access by non-residents, also provided spaces for children to play and encourage community connection (UKPIU, 2002).

c. The aim of a social capital assessment is to make networks and resources accessible for achieving significant socio-economic or health-related results. This approach must also consider the influence of various institutional arrangements that may promote or hinder the production of social capital. For example, in areas of high social capital (e.g., communities that provide 'meals on wheels'), policymakers must take into account the existing trust of community-lead services, and harness and support these resources rather than undermine or compete with them. It is in this sense that the social capital approach can be used to develop and evaluate projects and programmes.

Embed participation within the wider community:

d. Although community participation in government roles and agencies are lead by a relatively small group of people (Skidmore, Bound and Lownsbrough, 2006), it is imperative that the value of this existing small group is maximised.

e. One suggestion to do this is to select participants for governance roles by lottery, with financial support to encourage selected individuals to engage with their position. This would allow a diversity of people of different social connections from the usual "social leaders" to engage and develop social capital.

f. This could be supplemented by government sponsorship of ongoing, innovative and action-learning processes that would create a broader long-term foundation of community support for governance activity.

g. Citizens could also be empowered to invigorate local communities by using information and communication technology (ICT). This technology offers governments opportunities to consult with a broader array of citizens and seek feedback on government actions in the locality.

h. Disadvantaged groups, and particularly those most in danger of social exclusion, must have greater access to new media, in order to promote opportunities using ICTs, and also to insure that inequalities are not increased by those who have access to technology and those who do not.

i. The establishment of community groups must be facilitated. This could be helped by; the provision of finances and resources to launch and

launch organisations; public campaigns to encourage participation in community activities, and measures to encourage bridging social capital between existing community groups (Saguaro Group, 2000).

j. In line with establishing community groups, reforms to public liability laws and insurance arrangements, in addition to regulatory requirements, may be reviewed from a social capital perspective in order to ensure that events that have a high community value are facilitated and encouraged to progress (Saguaro Group, 2000).

Focus on education:

k. In particular, involving the various levels of families, communities, and the state in education, would encourage a sense of community ownership, mobilise additional resources (e.g., using school buildings in out-of-school-time for community activities), and strengthen institutional capacity, which subsequently improves the relevance and quality of education.

l. Lifelong learning is also an important aspect of education (Falk, Golding and Balatti, 2000). This taps into existing networks of people, and facilitates opportunities to develop new social networks and discuss important issues in the community. Lifelong learning can also play a key role in the development of flexible and sustainable communities (Falk, Golding and Balatti, 2000).

m. In line with recommendations from the OECD (2001), incentives for continual learning could be developed. By re-structuring the organisation of learning opportunities throughout the lifecycle, in addition to offering financial and tax incentives for learning, individual learners may be encouraged. Other incentives that could be offered include on-the-job training, part-time further education, alteration of work and study, and increasing the utility of distant and IT-based learning for adults (OECD, 2001).

n. Incorporating volunteering into the school curriculum may also play an important part in highlighting the importance of community participation.

o. Parenting education can promote positive parenting practices and social support. For example, as illustrated by the Productivity Commission (2003) in Australia, universal group parenting education provided for first-time parents can promote social support and create social networks among new parents. These relationships and networks can provide

ongoing social support and contact for these parents and children after the duration of the group meetings.

p. Providing psychological skills education for the unemployed around their strengths assessment and utilisation, optimism and resilience development may enable them to find employment easier and contribute to the community during the time of unemployment.

q. New local libraries can be created and maintained by joined community effort. Construction companies can be requested as part of a building permission to put up some rooms that would serve as a school library (or a chemistry centre, or a chess club, etc.). Wealthier individuals with extra books can be informed how to donate some to the libraries. Retired persons from the local community can be trained to volunteer their time to run the library, whilst requesting large corporations for a portion of their social responsibility funds to assist. A list of who has contributed and how would widely publicized on the internet, radio and television.

Local communities for beauty

r. Even poverty needs not be ugly. A local government may help residents in impovershed areas to organise themselves to make their surroundings more attractive. Living in a more attractive environment would not be a panacea for the problems of the poor. However, it would be a realistic goal to strive to achieve; it would bring people in the community together; it would offer a way for many, both rich and poor, to improve others' quality of life, including the raising of self-esteem and self-reliance; and it would facilitate the experience of beauty, which is good for its own sake.

s. Local church members can be encouraged to help get people to come out in order to pick up rubbish.

t. Local artists can be asked to come in to help teach residents, particularly young people, to use paints and mosaics and to construct sculptures.

u. Local farmers may be encouraged to help residents start and maintain gardens, and florists - to donate flowers and to teach people how to tend them.

v. Construction companies may be envisaged teaching unemployed people in the community how to repair and repaint houses, or about how to construct benches from scrap material.

w. In all cases, the state should take responsibility for organising 'before and after' pictures, to continue to enable people to take pride in what they have accomplished.

Architectural change for extending families

x. Nuclear families, let alone single-parent households, are often ill-equiped to survive the modern realities of life. Setting aside concern about gender roles (i.e. that women do the bulk of cleaning and caring), rearing children is too big a job to be done by one or two adults, especially when life in a modern economy typically requires labour by both parents to be undertaken on the job market. If it takes a village to rear a child, then perhaps a village should be created.

y. The state may promote specially designed housing so that a dozen or so units formed a collective compound reserved for those with children and those interested in supporting them. For example, such units may form a circle, so that the middle is a play area for children, which all could keep an eye on. The units could be spaced far enough apart for privacy, and yet they are close enough for others to hear if there is serious fighting and abuse.

z. It might be that two or three of the residents stay home to watch over the younger children during the day, and that they are financially supported by others who work outside the compound or by the state.

aa. One could suppose that there is a collective area where all children do their homework, or that there is a compound rule that no one may play outside until her homework is done, or that television broadcasts are turned off between certain times of the day.

bb. It could be that the parents would meet together every two weeks or so to talk about parenting issues or matters of collective concern regarding the compound, or that they listen to outside experts such as social workers and child psychologists during this time.

Case Study: Unemployement training, Esher House

In 2012, employment advisors from several organisations in the UK and Australia were trained by Esher House Ltd in ten academically-based methods for enhancing strengths, resilience and character over a number of concurrent days. This training was enhanced with overseeing quality advisors subsequent performance, presentation materials and a booklet reminding the advisors of the correct intervention techniques. The focus was not on directly telling the unemployed clients how to go about entering employment, but in allowing them to build confidence and efficacy in their own capabilities and set their own goals and find their own solutions – no matter how seemingly un-related to employment these were.

Advisors were also trained in Solutions Focused conversations, enabling a salutogenesis approach – talking about positives, strengths and goals, instead of retrospectively focusing upon problems, issues and failings.

Where implemented, all projects achieved the best "Into Work" and "Sustained Employment" outcomes in each country within their sector – i.e. 12 month+ unemployed on Ingeus' UK Work Programme contact, generationally unemployed, etc.

Barriers to implementation

Recommendation 1: Take social capital into account in the development and evaluation of projects, programmes, and subsequent policies.

- It may be necessary to create a department within government, similar to the agency responsible for assessing policy and programme implication for the environment, for the assessment and evaluation of social capital.

- There is potential risk in evaluating government projects, programmes, and policies in terms of social capital, as government initiatives that have created economic growth that may be held as successful, may be found to destroy social networks and decrease community vitality.

- In order to assess social capital, and to create a government agency to carry out this service, financial investment is necessary in recruitment, training, and implementation. It would be difficult to argue for investment for a social capital assessment agency when others agencies may be looking to invest in programmes that have tangible results (e.g., infrastructure, health service, education).

- Employment and training will be required in the assessment and evaluation of social capital.

- Citizens are more likely to advocate for the alleviation of the symptoms of low social capital (e.g., crime) or more high profile social problems such as poverty, rather than the lack of social networks.

Recommendation 2: Embed participation within the wider community

- There may be political resistance to creating community partnerships, as developing community discussions and facilitating community networks is likely to significantly increase and change work practices for government officials. In addition, the resistance is even more likely if these very networks then critique and challenge government policy and action.

- The increased workload of engaging with community partnerships is likely to need the recruitment of additional government agency officials. In addition, it is necessary to invest in community partnerships. Individuals from the community selected to participate in the community partnerships may also need financial support to participate.

Recommendation 3: Focus on education

- Traditional education policymakers are likely to resist changes that may deviate from the traditional academic focus in schools, especially in light of any costs incurred that may be at expense of conventional expenditures.

- The introduction of universal group parenting programmes in communities and volunteer programmes in schools will create administrative and supervisory costs.

- Parenting programmes may be seen as authoritarian and divisive if a universal approach is not adopted and adhered to in practice. If "at-risk" groups are over-represented in such programmes, a breakdown of trust and social cohesion may occur.

Recommendation 4: Local communities for beauty

- One real concern about this proposal is sustainability. How and who would ensure that the new environment is maintained? One way to deal

with this would be for the local government to intervene in at regular intervals, but a better one would be for the community itself to take responsibility. People who are retired or influential could be in charge of sustaining the renewal, with the state providing some forms of support for them.

Recommendation 5: Architectural change for extending families

- The biggest problem with this suggestion is cost, or rather scope. It would take space to host these kinds of developments, which would not easily work in large apartment buildings. The numbers of people who could be involved, at least initially, would not be great. However, if the idea caught on, then developers would likely construct them without state involvement. Furthermore, it could be that the benefits of living in such a communal arrangement would help reduce financial burdens that the state would otherwise face; one would expect adults to be less stressed and depressed and the young to do better in school and to be better socialised.

Policy actions

What processes should be followed to build policy (local or national consultation and experimentation rather than a blueprint)?

The first essential process to follow in order to build community vitality policy is to measure social capital in all projects, programmes and policies. In a number of recommendations outlined by Sandra Franke (2005), the Canadian Policy Research Initiative outlines the approach to measuring social capital. In the first instance, it is suggested that the government adopt a social capital approach to developing research, data, policy and evaluations. As outlined above, this would include the assessment of direct and indirect influences of policy and programmes on the social networks and social resources of individuals and communities. This process involves three facets. First, it is necessary to document the existence of social networks at the individual and/or group level to identify the presence and manifestations of social capital (Franke, 2005). The second facet of this process is to examine the conditions of social network functioning and exchanges in order to understand how social capital operates. This is necessary at all levels, to assess how social capital is created, and used, by various groups within diverse communities. The third facet of measuring social capital is to establish links between social capital and specific outcomes, in order to clarify the potential of social capital in specific contexts with specific issues.

In order to gauge the influence of new policies and programmes, an increasing proportion of countries is using pilot projects in order to facilitate 'fine-tuning' before large-scale implementation. The UK's Strategy Unit (2002) recommends the widespread use of pilot projects, as the benefits largely offset the costs (e.g., resources and time). However, a notable limitation of pilot projects is their sensitivity to context, thus producing difficulty in generalising their results. Thus, contextual factors must be well defined in the assessment of social capital within a pilot project in order to obtain valid data.

What urgent priorities need more 'research and development'?

To improve policy design and coherence, further research is needed to provide conceptual clarity surrounding social capital itself, deepen understanding of the sources of social capital and how they operate, and to improve on current measures and measurement methodologies. The current lack of conceptual clarity, together with the potential risks that some government actions could even erode social capital, suggest that there may be merit in the short term in tending towards small-scale policy experimentation. This would provide experience and data on different policies aimed at supporting or enhancing social capital. Similarly, there would be merit in regular policy evaluations to assess the effects of such policies and to suggest appropriate design adjustments.

Further, establishing the direction and extent of any causal link between social capital and the variables of interest is not straightforward because, among other things, it is plausible that high levels of social and economic wellbeing can lead to higher social capital, rather than (or as well as) the reverse. These are key questions that necessitate clarity in order to maximise the practical implications of social capital policy.

Making Participation a National Priority

Key Actions
At a macro-level, it is necessary for government to develop a long-term vision and political commitment to developing community vitality. Given that many forms of social capital may be slow to change or establish (e.g., trust), a long-term commitment and vision is vital. It is also imperative at a government level to recognise the importance of social networks and social connections as a resource within and between communities.

In order to underline the long-term commitment to promoting social capital, it may be necessary to create a government agency responsible for assessing the direct and indirect influences of government projects, programmes, and

policies on social capital and community interpersonal networks. This investment underlines the political commitment and can be used to advocate for the assessment and evaluation of programmes and policies from a social capital perspective.

This agency will fulfil a number of key roles. For example, recruits to this agency will be trained in the assessment of social capital. This agency can also be used to train government officials in engaging with local communities and when and how to create "community partnerships". This agency can also create broad procedural guidelines for the establishment of community partnerships.

For example, such guidelines would emphasise the role of public agencies in the interface between government and communities through these partnerships. Public agencies are in the best position to foster community capacity as they have "buy-in" through local services (e.g., Police Service, Education Department, and Health Department etc.). Thus, there is an existing foundation of trust and confidence between local public services and communities.

While the role of government agencies has traditionally been service delivery, given the increasing demands for greater community capacity, the ability of the public service to contribute to community capacity becomes more important.

The goal of the public service is to become not just experts in their area, but to foster the relationships and trust between public agencies and their communities.

Agencies need to meld "top down" and "bottom up" community involvement. For example, top-down changes will not succeed without an ethic of community involvement at the "grassroots" level. While everyday community-public servant relationships will largely remain at an informal intuitive level without top down structures providing the organisation to make them more deliberate.

In addition to partnerships between government agencies and communities, building social capital also requires coordination between government agencies. The complex and interrelated issues facing communities require agencies to work cooperatively.

No one department or agency can help communities build capacity. All government agencies have a role.

Data and measurement for policy

The GNH survey provides a number of questions on community vitality that incorporate amount of donations and volunteering, sense of belongingness and trust in neighbours, a measure of family relationships and a measure of safety. While these questions provide some insight into the vitality of a community, there are significant gaps. For example, there is no indication of an individual's interpersonal connections outside the family, no indication of social participation, no clear measure of social support, and no indication of civic engagement. Although various problems exist in the conceptualisation of social capital, a number of measures have been proposed. For example, the World Bank Social Capital Assessment Tool (SOCAT) is a multifaceted measure that assesses social capital at household, community and organisational levels Due to the burdensome nature of this assessment (qualitative and quantitative components), it may not be appropriate for the inclusion in the GNH. A more appropriate measure may be the social capital indicators proposed by the Siena group or Statistics Canada's General Social Survey (Zukewich and Norris, 2005). These questions were developed to be inserted into various national or international surveys. Questions assess an individuals social participation (e.g., type(s) of group in which respondent is involved), social support (provided and received), social networks (e.g., frequency of contact with friends, family, or work colleagues), and civic participation (e.g., voted in most recent election).

A different perspective may be needed to assess the social networks from a social policy perspective. Under this light, the assessment tool called the 'Social Capital Impact Assessment' developed by the Saguaro Seminar is appropriate to use to assess the impact of the implementation of a social capital project/programme. This assessment can be used to obtain information about both the correlates of social capital, and/or about the levels and types of social capital. Questions refer to bridging social capital (e.g., "will the policy create more/less occasions for people to interact with those that differ from them?"), family ties (e.g., "will the proposed initiative increase or decrease people's discretionary time?"), and trust in institutions (e.g., "Is the act institution suggesting a process for securing approval of this initiative in which all parties have confidence?").

Monitoring

Investment is needed into the domain of community vitality. While a number of government services are implicitly directed to increasing the social capital of individuals and communities, investment is needed to provide a scientific foundation for the future assessment and evidence-based implementation of programmes and policies to increase social capital. A special body charged with the assessment and evaluation of all government programmes and policies is

necessary given the large undertaking of evaluating social capital. A useful monitoring system could be the measurement of interagency work, or the number of multidisciplinary projects implemented at a community level. This may signify the process of creating community partnerships. In terms of finance, it may be difficult to assess the benefit of social policies, as converting a particular change in social capital into a benefit or cost estimate, comparable to other benefits and costs, raises problems (UKPIU, 2002). In addition, assessing the direct and indirect expenditure on social capital is difficult, as a variety of current government expenditures, for example into health, security, and infrastructure, are likely to already impact on a community's social capital. Therefore monitoring the development of interagency and community partnerships may be a valid proxy for investment in social capital.

References

ABS (Australia, Bureau of Statistics), 2002. *Social capital and social wellbeing.* Discussion Paper, Canberra: Government of Australia.

_____ 2004. *Australian social capital framework and indicators.* Canberra: Government of Australia.

Adams, R.E., 1992. Is happiness a home in the suburbs? The influence of urban versus suburban neighborhoods on psychological health. *Journal of Commununity Psychology*, 20, 353–372.

Alesina, A., Di Tella, R. and MacCulloch, R., 2004. Inequality and happiness: Are Europeans and Americans different? *Journal of Public Economics, 88*, 2009–42

Alesina, A. and La Ferrara, E., 2005. Preferences for redistribution in the land of opportunities. *Journal of Public Economics, 89*(5), 897-931.

Aubin, E. D. S., 2013. Generativity and the meaning of life. In: J. Hicks and C. Routledge, eds. *The experience of meaning in life.* Dordrecht: Springer, ch. 19.

Baum, F. E., Ziersch, A. M., Zhang, G. and Osborne, K., 2009. Do perceived neighbourhood cohesion and safety contribute to neighbourhood differences in health? *Health & Place*. 15(4), 925–934.

Baumeister, R., 1991. *Meanings of life.* New York: The Guilford Press.

Becker, E., 1971. *The birth and death of meaning: An interdisciplinary perspective on the problem of man*, 2nd edn. New York: The Free Press.

Bowlby, J., 1969. *Attachment and loss: Vol. 1. Attachment*. New York: Basic Books.

Catalano, R., Dooley, D., Novaco, R., Wilson, G. and Hough, R., 1993. Using the ECAdata to examine the effect of job layoff on violent behavior. *Hospital and Community Psychiatry, 44*, 874–887.

Cavaye J.M., 2000. *The role of government in community capacity building*. Department of Primary Industries and Fisheries Information Series QI99804. Queensland Government. Available at

http://www.communitydevelopment.com.au/Documents/The%20Role%2
0of%20Government%20in%20Community%20Capacity%20Building.pdf
(Novermber 16, 2012).

Chophel, S., 2010. Culture, public policy and happiness. *Journal of Bhutan Studies,* 82-99.

Cohen, S. and Syme, S. L., 1985. Issues in the application and study of social support. In: S. Cohen and S. L. Syme, eds. *Social support and health,* pp 3-22, Orlando: Academic Press.

Commonwealth of Australlia, 2005. *The role of ICT in building communities and social capital: A discussion paper.* Canberra: Department of Communications, Information Technology and the Arts. Available at; http://www.archive.dbcde.gov.au/__data/assets/pdf_file/0004/23737/T he_Role_of_ICT_in_Building_Communities_and_Social_Capital.pdf

Crescioni, A. W. and Baumeister, R., 2013. The four needs for meaning, the value gap, and how (and whether) society can fill the void. In: J. Hicks and C. Routledge, eds. *The experience of meaning in life.* Dordrecht: Springer, ch.1.

De Jesus, M., Puleo, E., Shelton, R. C. and Emmons, K. M., 2010. Associations between perceived social environment and neighborhood safety: Health implications. *Health & Place,* 16(5), 1007–1013. DOI: http://dx.doi.org/10.1016/j.healthplace.2010.06.005

Diener, E., Lucas, R., Schimmack, U. and Helliwell, J., 2009. *Wellbeing for public policy.* Oxford: Oxford University Press.

Falk, I., Golding, B. and Balatti, J., 2000. *Building communities: ACE, lifelong learning and social capital*. An anthology of word portraits reporting research conducted for the Adult, Community and Further Education Board, Victoria. Melbourne: Aris.

Feldstein, L. and Sander, T., n.d. *Social capital impact assessment*. Saguaro Seminar: Civic Engagement in America, John F. Kennedy School of Government, Harvard University. <http:// www.ksg.harvard.edu/saguaro/pdfs/skimpactassessment.pdf>

Field, J., 2003. *Social capital.* NY: Routledge.

Fischer, C., 1982. *To dwell among friends.* Chicago: University of Chicago.

Flora, C. B. and J. L., Flora., 1995. The Past and Future: Social Contract, Social Policy and Social Capital. In: S. A. Halbrook and C. E. Merry, eds. *Increasing Understanding of Public Problems and Policies.* Oak Brook, Illinois: Farm Foundation. pp. 53-64.

Franke, S., 2005. *Measurement of social capital reference document for public policy research, development, and evaluation.* Canada: Policy Research Initiative. Available

at http://policyresearch.gc.ca/doclib/Measurement_E.pdf (November 16, 2012).

Fromm, E., 1955. *The sane society*. New York: Holt, Rinehart & Winston.

Fujiwara T, and Kawachi, I., 2008. Social capital and health: a twin study. *American Journal of Preventative Medicine, 35*, 139-144.

Fukuyama, F., 1999. *The great disruption: Human nature and the reconstitution of social order*. London: Profile Books.

Gorz, A., 1980. *Ecology as politics*. Boston: South End Press.

Gouldner, A. W., 1960. The norm of reciprocity: a preliminary statement. *American Sociological Review, 25*(2), 161–178.

Green, J. D. and Campbell, W. K., 2000. Attachment and exploration in adults: Chronic and contextual accessibility. *Personality and Social Psychology Bulletin*, 26, 452–461.

Griffin, A., S. and West, S. A., 2003. Kin discrimination and the benefit of helping in cooperatively breeding vertebrates. *Science, 302*, 634-636.

Grigsby, W., 2001. *Community vitality: Some conceptual considerations*. Pennsylvania State University: Northeast Regional Center for Rural Development

Grootaert, C. and van Bastelaer, T., 2001. *Understanding and Measuring Social Capital: A Synthesis of Findings and Recommendations from the Social Capital Initiative.* SCI Working Paper No. 250. Washington: The World Bank.

Habermas, J., 1984. *The theory of communicative action, Volume one: Reason and the rationalization of society.* Thomas McCarthy, tr. Beacon Press: Boston.

_____ 1987. *The theory of communicative action, Volume two: Lifeworld and system.* Thomas McCarthy, tr. Beacon Press: Boston.

Hagerty, B. M., Lynch-Sauer, J., Patusky, K., Bouwsema, M. and Collier, P., 1992. Sense of belonging: A vital mental health concept. *Archives of Psychiatric Nursing*, 6, 172–177.

Hagerty, B. M., Williams, R. A., Coyne, J. C. and Early, M. R., 1996. Sense of belonging and indicators of social and psychological functioning. *Archives of Psychiatric Nursing*, 10, 235– 244.

Helliwell, J. F. and Huang, H., 2011. Wellbeing and trust in the workplace. *Journal of Happiness Studies,* 12(5), 747-767.

Helliwell, J. F. and Wang, S., 2010. *Trust and wellbeing* (No. w15911). National Bureau of Economic Research.

Hoffer, C. R., 1931. Understanding the community, *The American Journal of Sociology*, 36(4), 616-624.

Hughes, P., Bellamy, J. and Black, A., 2000. Building social trust through education. In I. Winter (Ed.), *Social capital and public policy in Australia* (pp. 225-249). Melbourne: Australian Institute of Family Studies.

King, D., 2008. Neighborhood and individual factors in activity in older adults: Results from the neighborhood and senior health study. *Journal of Aging and Physical Activity,* 16, 144–170.

Kohut, H., 1977. *The restoration of the self.* New York: International Universities Press.

Krupp, D. B., DeBruine, L. M. and Barclay, P., 2008. A cue of kinship promotes cooperation for the public good. *Evolution & Human Behavior, 29,* 49-55.

Layard, R., Clark, A. and Senik, C., 2012. The causes of happiness and misery. In: J. F. Helliwell, R. Layard and J. Sachs, eds. *World Happiness Report*. New York: The Earth Institute, Columbia University.

Luhmann, N., 1988. Familiarity, confidence, trust: Problems and alternatives. In D. Gambetta, ed. *Trust: Making and breaking cooperative relations.* Oxford: Blackwell. pp 95–107.

Macintyre, S, and Ellaway, A., 2000. Ecological approaches: Rediscovering the role of the physical and social environment. In: L. F. Berkman and I. Kawachi, eds. *Social epidemiology.* New York: Oxford University Press. pp 332-348.

Macionis, J., 2010. *Sociology*. Boston: Pearson Education.

McKnight, J. L., 1995. *The careless society - community and its counterfeits*. New York: Basic Books.

McMillan, D. W. and Chavis, D., M., 1986. Sense of community: A definition and theory. *American Journal of Community Psychology,* 14(1), 6-23.

Maslow, A. H., 1962. *Towards a Psychology of Being*. Princeton: D. Van Nostrand Company.

Meier, S. and Stutzer, A., 2008. Is volunteering rewarding in itself? *Economica,* 75(297), 39-59.

Meyer, S., Ward, P., Coveney, J. and Rogers, W., 2008. Trust in the health system: An analysis and extension of the social theories of giddens and luhmann. *Health Sociology Review,* 17(2), 177-186.

Middleton J., 1998. Crime is a public health problem. *Medicine, Conflict and Survival,* 14, 24–28.

Navarro, V., 2002. *The political economy of social inequalities. Consequences for health and quality of life*. Amityville, NY: Baywood Publishing Company.

Newton, K., 2001. Trust, social capital, civil society, and democracy. *Interrnational Political Science Review, 22*(2), 201–214

OECD (Organisation for Economic Cooperation and Development), 2001. *The well-being of nations: The role of human and social capital*. Paris: OECD.

Ostrom, E., 2000. Social capital: a fad or a fundamental concept? In: P. Dasgupta and I. Serageldin, eds. *Social Capital: A Multifaceted Perspective*. Washington, DC; World Bank.

Parke, R. D. and O'Neil, R. L., 1999. Neighborhoods of Southern California children and families. *Future of Children,* 9(2): 58-63. Available at: http://www.futureofchildren.org/usr_doc/vol9no2Art6done.pdf

Peterson, *C.* and Seligman, M., 2004. *Character strengths and virtues: A handbook and classification.* Oxford: University Press.

Powdthavee, N., 2008. Putting a price tag on friends, relatives, and neighbours: Using surveys of life satisfaction to value social relationships. *Journal of Socio-economics,* 37(4), 1459-1480.

Pritchard, R. D., 1969. Equity theory: A review and critique. *Organizational behaviour and human performance,* 4, 176-211.

Productivity Commission, 2003. *Social capital: Reviewing the concept and its policy implications*, Research Paper, AusInfo, Canberra

Putnam, R. D., 1993. *Making democracy work. Civic traditions in modern Italy.* Princeton: Princeton University Press.

_____ 2000. *Bowling alone: The collapse and revival of American community*. New York: Simon and Schuster.

Saguaro Group, 2000. *Bettertogether*. Available online at http://www.bettertogether.org/bt_ report.pdf (Retrieved 12 December 2012).

Salamon, L. M., Sokolowski, S. and Haddock, M., A., 2011. Measuring the economic value of volunteer work globally: concepts, estimates, and a roadmap to the future. *Annals of Public and Cooperative Economics,* 82(3), 217-252.

Sampson, R. J., 2003. Neighborhood-level context and health: Lessons from sociology. In I. Kawachi and L. F. Berkman, eds. *Neighborhoods and health,* pp 132-146. New York: Oxford University Press.

Schmutte, P. S. and Ryff, C. D., 1997. Personality and well-being: Reexamining methods and meanings. *Journal of Personality and Social Psychology*, 73, 549–559.

Scholz, J.T. and M. Lubell, 1998. Trust and taxpaying: Testing the heuristic approach to collective action. *American Journal of Political Science,* 42(2): 398–417.

Seachris, J. ed., 2012. *Exploring the meaning of life: An anthology and guide.* Oxford: Wiley.

Shepard, B. H. and Sherman, D. M., 1998. The grammars of trust and general implications. *Academy of Management Review,* 23(3), 422-438.

Siegrist, J., 2005. Social reciprocity and health: new scientific evidence and policy implications. Psychoneuroendocrinology. 30(10):1033–1038

Skidmore, P., Bound, K. and Lownsbrough, H., 2006. *Community participation: Who benefits?* York: Joseph Rowntree Foundation. Available at: www.jrf.org.uk.

Stiglitz, J.E., Sen, A. and Fitousi, J., 2010. *Mismeasuring our lives: Why GDP doesn't add up*. New York, N.Y.: New Press

The World Bank, 1999. *What is social capital?* Available at: http://www.worldbank.org/poverty/scapital/whatsc.htm.

UKPIU (United Kingdom Performance and Innovation Unit), 2002. *Social capital: A discussion paper*. Discussion Paper. London: Performance and Innovation Unit.

Ura, K., and Zangmo, T., 2008. *An approach to the indicators of GNH.* Document presented at the Regional Conference on Revitalizing Primary Health Care in Jakarta. World Health Organization, 6-8 August. Available at http://www.searo.who.int/LinkFiles/Conference_Panel-B3.pdf accessed on 10 November 2012.

Ura, K., Alkire, S., Zangmo, T., & Wangdi, K., 2012. *A short guide to Gross National happiness index.* Thimphu: The Centre for Bhutan Studies. Available at http://www.grossnationalhappiness.com/wp-content/uploads/2012/04/Short-GNH-Index-edited.pdf.

Verbrugge, L. M., and *Chan*, A., W., *2008*. Giving help in return: family reciprocity by older Singaporeans. *Ageing and Society, 28*(1): 5-34

Ward, P. and Meyer, S., 2009. Trust, social quality and well-being: A sociological exegesis. *Development and Society*, 38(2), 339-363.

Wen, M., Kandula, N. R. and Lauderdale, D. S., 2007. Walking for transportation or leisure: What difference does the neighborhood make? *Journal of General Internal Medicine,* 22(12), 1674–1680.

Wilkinson, R. and Pickett, K., 2011. *The spirit level: why equality is better for everyone.* Penguin.

World Happiness Report, 2012. Available at http://www.earth.columbia.edu/sitefiles/file/Sachs%20Writing/2012/World%20Happiness%20Report.pdf. (November 15, 2012).

Zukewich, N. and Norris, D., 2005. *National experiences and international harmonization in social capital measurement: A beginning.* Draft paper submitted at the February 9 - 11, 2005 meeting of the Siena Group in Helsinki. Available at <http://tilastokeskus.fi/tup/sienagroup2005>.

Chapter 16: The Power of GDP and its Limitations

— Johannes Hirata

Abstract

This chapter will discuss the relationship between Gross National Happiness (GNH) and Gross Domestic Product (GDP). It will discuss the background and the shortcomings of GDP as a welfare indicator. It will then discuss the possibility of a healthy economy in the absence of economic growth and go on to outline the role of the economy in a GNH perspective. Finally, it will discuss the role of business in a GNH oriented society.

1. Introduction

It is difficult to think of a news headline that worries people and politicians more than that the economy stopped growing. It will immediately generate a debate of what needs to be done to restore economic growth. A protracted recession makes it practically impossible for a government to be reelected, and strong economic growth will do more to increase the chances for reelection than even the most reflected and balanced political program.

When asked about this worry, people can name a number of plausible reasons why they are so worried: they see that economic recessions are times of rising unemployment and that public finances get under stress, among other reasons. In low-income countries, an additional worry is of course that the fight against poverty will be much more difficult in times of recession.

What is Gross Domestic Product? The idea behind the concept of Gross Domestic Product (GDP) was to measure the volume of economic activity by the total market value of all goods – material and immaterial – produced within a country within a given year. Due to conceptual difficulties to delineate economic production and also due to practical limitations of measurement, GDP is almost exclusively based on actual monetary transactions that can be observed (the most notable exception to this is the imputed rent homeowners are assumed to pay to themselves). The "gross" qualifier indicates that no correction is made for the depreciation of capital and infrastructure. GDP per capita has become the most widely used standard to assess a nations welfare because dividing the value of an economy's total production by the number of its inhabitants is usually considered a good approximation of an individual's (potential) standard of living. Economic growth is usually (including in this report) defined simply as the year-on-year change in a country's GDP (after correcting for inflation). GDP is a flow variable, which means that it measures

some activity (in this case production) per time interval, typically per year. By contrast, a stock variable such as the amount of capital available is measured at a given point in time, describing a momentary state.

On the other hand, when countries do grow for extended periods of time, this does not seem to solve many problems, and it adds new problems. For example, depression rates, obesity work-related stress, drug abuse and many other afflictions of societies show no sign of improvement but are in many places deteriorating (Layard, 2005, pp.35-38; Wilkinson and Pickett, 2010, p.35). Since economic growth has so far always been associated with increased material and fossil energy use, it also increases the burden on our planet.

GDP, therefore, fails as an indicator of welfare, and it does so basically for three reasons (Stiglitz, Sen and Fitoussi, 2009):

a. As a measure of flows, it neglects the effect of economic activity on stocks. Another way of putting this is that GDP neglects the temporal dimension and therefore the question of sustainability. When a country sells off its natural resources, when a flood destroys millions worth of infrastructure or when economic activity contributes to climate change, welfare is clearly reduced – at least in the long run – but GDP does not reflect this.

b. As an aggregate measure, GDP tells us nothing about inequality. When GDP increases, this alone does not say anything at all about the living standard of the typical citizen or about the lives of the poorest (or of the richest for that matter). Without this information, however, it would be very controversial – to say the least – whether a nation's welfare has increased.

c. GDP largely ignores non-marketed goods and activities (except for a few estimated categories such as government services or home-owners' imputed rents). For example, changes in household work, voluntary work, the quality of jobs, crime or environment services are not reflected in GDP.

In addition, GDP lacks accuracy in various respects. Many components must be estimated, some are liable to erroneous reporting, and the estimation of the rate of inflation – used to determine the more relevant *real* rate of economic growth – is inherently imprecise. To be fair, imprecision will be a feature of any indicator of welfare, but the point is that GDP should not be portrayed as a uniquely precise instrument.

These shortcomings are largely acknowledged in economics. In fact, the intellectual father of GDP, Simon Kuznets, explicitly warned against interpreting GDP as a measure of welfare (Kuznets, 1934). However, economists, governments and the general public around the world still look at GDP figures as a welfare indicator and consequently strive after economic growth.

The reasons they have for doing so are not necessarily to be found in materialist or consumerist fixations. For low-income countries, a concern for economic growth may often be grounded in a sincere concern for poverty eradication that is, though perhaps not impossible, much more difficult to achieve in the absence of economic growth.

For high-income countries, GDP growth is not usually advocated in the name of raising material living standards. Instead, the main reasons given for pursuing economic growth in high-income countries are typically a concern for jobs, for an acceptable income distribution, for social peace, for healthy public finances and other objectives that require economic resources. Indeed, it would be awkward to advocate economic growth as an end in itself rather than as a means to achieve goals such as these that actually matter to the lives of people. Gross National Happiness converges with this view of economic growth on a number of important points: In a GNH perspective, too, employment is of course an objective of paramount importance, and healthy public finances are a matter of fairness towards the presently living young generation as well as towards future generations.

However, taking some steps back from our conventional economic thinking, it would be very ironic if, despite our remarkable technological and intellectual progress throughout the centuries, our man-made economic system forced us to make our economies grow year after year and to have to accept an increase in work-related stress, in income inequality, in environmental degradation and other ills for the sake of avoiding disaster. If this were so, we would at some point in history have relinquished our liberty to choose to live well on our own terms rather than by the imperatives of a soulless economic system. If this is the case, then we have every reason to rethink the political and economic arrangements and choices that are depriving us of this fundamental liberty. The GNH perspective can be understood as an ongoing endeavor with exactly this objective.

Sustainable wellbeing without economic growth?

We need to understand the possibility and the implications of a society without economic growth, and for the right reasons. There is no point in being against economic growth as such because economic growth can in principle manifest

itself in so many different ways. However, in the real world economic growth is often accompanied by developments that are unjust towards or detrimental to the wellbeing of presently living people or of future generations, and if these negative implications do not justify whatever benefits may come from economic growth, we are under a moral obligation to reduce these negative effects, and we should try to minimize any collateral problems that may entail.

At this point we once again need to make a conscious distinction between high-income countries and low-income countries. Even though, strictly speaking, the following considerations should apply to all countries, at least on a conceptual level, they may appear irrelevant or even cynical from the perspective of low-income countries. However, while development priorities are certainly different in low-income countries, even they should be interested in a sound long-term framework of good development. Thus, while the relevance of these considerations may indeed be more visible in the case of high-income countries, it remains true for all countries that good development should never be a one-dimensional pursuit of economic growth.

Employment

In high-income countries, the number one argument for economic growth is the view that steady economic growth is an indispensable prerequisite to keep unemployment from increasing. This view is backed by strong empirical evidence: it is true that there is a strong statistical correlation over time between low economic growth and increasing unemployment (a relationship known since the 1960s as "Okun's law"; IMF, 2010, p.81). There is also a highly plausible theoretical explanation for this relationship: as long as we have a gradual increase in labor productivity, over time we will need ever fewer hours of work to produce the same amount of goods. This implies that keeping up the demand for work (i.e., preventing unemployment from increasing) will require an increase of production – and thus economic growth.

The GNH perspective coincides fully with this view on the vital importance of keeping involuntary unemployment at a minimum. In addition to the evident short-term and long-term economic costs associated with high unemployment, there is overwhelming evidence that losing one's job is one of the worst life events in terms of its effect on a person's subjective wellbeing (Layard, 2005, pp.67-68).

Concluding from this that we have no alternative but to pursue economic growth would be wrong, however. For one thing, nothing forces us to react to a productivity increase and to the resulting fall in demand for labor with an increase in production in order to keep people in jobs: we can as well reduce the number of hours people work. If we do this in step with the increase of labor

productivity, unemployment will not go up (or down) as a result because companies will need the same number of workers from year to year just to maintain a given output, and this will be met by constant demand for their products (because incomes should also remain the same when hourly wages increase at the rate of productivity growth and working hours are reduced by the same amount). Importantly, workers will benefit by gaining more leisure time.

General working time reductions are not pie in the sky: many European countries reduced the annual hours worked per employed person by around 20% in the decades following World War II, primarily by reducing the workweek and by extending holiday allowances (e.g., in Germany the reduction of hours worked was 22% between 1960 and 1991). Today, the enormous differences between countries (in 2010, an average fully employed person worked an average of 25% more hours per year in the US than in Germany) show that there is a huge potential for working time reductions in some countries simply through convergence to the level of many European countries, even before talking about more radical proposals such as a general 21-hour work week (nef, 2010).

Another way to maintain full employment without generating economic growth would be through deliberate reductions of productivity in certain industries. An example would be the greening of energy production through regulation that increases the cost of electricity generation, e.g. through emission caps, carbon taxes or through outright bans on certain technologies (such as Germany's decision to phase out nuclear power). In this scenario, companies and consumers will substitute undesirable technologies with desirable technologies that are less efficient (at least in a short-run perspective that neglects the full costs of production). As a consequence, the economy will have to move workers out of some other sectors into electricity generation, reducing the output in the other sectors. If this effect is strong enough to offset the labor productivity increase taking place in other parts of the economy, economic growth will be zero without increasing unemployment.

Empirical evidence on economic growth and employment suggests a strong association between the rate of economic growth and the rate of unemployment. This is corroborated by our first-hand experience that unemployment goes up in times of economic recession and goes down in times of economic recovery. It would be wrong, however, to conclude from this that there is a *systematic* dependence of full employment on continuous economic growth because our experience can only show us what happens within economic systems that are

actually in place, but that is of course not a good guide for what might happen in alternative institutional arrangements.

Imagine living in a crowded city plagued by daily traffic jams. No matter how bad the traffic jam, taking the car would still be faster than taking the bus (which, in the absence of bus lanes, is as stuck as all other vehicles). Going strictly by empirical evidence, citizens of this city would be led to believe that urban transit systems should favor cars over buses, and an empirical study could easily come up with impressive statistics demonstrating the relationship. One needs to think beyond the current institutional arrangements to understand that people would get to work faster if *everybody* took the bus rather than the car.

Scope for redistribution

Economic growth is also frequently advocated in the name of reducing income inequality within a society. By increasing the total size of the "pie" (GDP) it is possible to increase the piece of the pie of poor people (i.e., their living standards) without taking anything away from others.

The problem with this argument, however, is that this hardly ever happens in practice. It is of course theoretically possible to reduce income inequality in times of economic growth in this way, but it just does not happen most of the time. Perhaps the main reason for this is that people tend to oppose tax increases when the rate of taxation approaches a level that is high in relative terms, such as 30% or 50% of their gross salary, no matter if they were the main beneficiaries of economic growth in the past. In fact, income inequality is as likely to widen as it is to narrow in the presence of economic growth. As it happens, however, within-country income inequality has widened in many countries over the last twenty years or so despite continuing economic growth.

This problem would not occur if income inequality could be reduced on the level of before-tax incomes thanks to converging gross wage rates rather than on the level of after-tax income (i.e., through increasing taxation of the rich and reducing taxation of the poor). However, this is no longer an argument for economic growth as such, but rather for a certain structural change that will lead to inequality-reducing economic growth. This difference would then lead to substantially different priorities and policy implications compared to the pursuit of economic growth as such.

From a GNH perspective, income inequality is a vital concern, too. While GNH by no means requires perfect equality of incomes, the extent of income inequality presently observed in most countries across all income categories appears to be detrimental to the wellbeing not only of the poor, but also in

many respects to that of the rich themselves (Wilkinson and Pickett, 2010). The GNH perspective would also favor a convergence of before-tax incomes rather than of after-tax incomes because that would allow people to experience the appreciation of others for their work that is conveyed through a dignified salary. It would also avoid the understandable psychological resistance of high-income earners to very high tax rates.

As for the argument that a reduction of income inequality must not go at the expense of anybody's income entitlements, this should be assessed on a case-by-case basis: it would be wrong to indiscriminately condone each and every income for fear of people's resistance to any reduction of their incomes. By declaring it a taboo to reduce anybody's current income, one would betray potentially legitimate claims of the disadvantaged in the name of appeasing the lucky ones or even the beneficiaries of a potentially unfair distribution of economic power.

Most importantly, however, the GNH perspective leaves it open whether a reduction of income inequality goes together with economic growth or not: again, GNH is not opposed to economic growth, it simply does not believe in economic growth as an end in itself. If a desirable reduction of income inequality leads to worse consequences overall without economic growth than with economic growth, then economic growth will of course be part of the solution.

Public finances

The public finances argument for economic growth states that growth is necessary to reduce or stabilize public debt and to maintain an adequate level of social security benefits. Even though this view is rarely disputed, it is based on blatant inconsistencies.

One basic problem is that the amount of transfer payments (pensions, unemployment benefits etc.) that is deemed appropriate depends strongly on GDP (at least in the long run). The higher the living standard in a given country, i.e. the higher per-capita GDP, the higher transfer payments need to be because of the relativity of poverty and wellbeing with respect to income (Layard, 2005). Clearly, pensioners in a country such as Norway will require much higher pensions to be protected from poverty and social exclusion than pensioners in a country such as Mexico (even after adjusting for differences in purchasing power). Thus, economic growth obliges the government to raise ever more revenue just in order to keep transfer payments – and wellbeing – at an acceptable level. The problem does of course not go away by shifting from a public to a private pension system. It merely means that instead of rising taxes, people will pay rising insurance contributions if they want to have a living

standard at old age that is adequate relative to the average living standard in one's society by that time. Thus, since the financing needs for transfer payments increase in line with economic growth, the public finance argument for economic growth becomes a purely circular argument, basically saying that we need economic growth in order to pay for needs that we otherwise would not have in the first place.

The effect of economic growth on public deficits and debt is more complex. On the one hand, it would of course be true to say that for a given absolute level of debt, economic growth will reduce the debt-to-GDP ratio and make a country's public debt more bearable. This is only true, however, if government expenditures do not increase in response, or at least not at the same rate as revenues. As far as transfer payments are concerned, this has already been shown not to be true: these expenditures will typically rise with GDP, and for good reasons. The budget may or may not benefit from economic growth in other ways, but it is striking that there is no relationship between a country's debt-to-GDP ratio and its level of GDP per capita[1]. In fact, many emerging economies have substantially lower debt-to-GDP ratios than many high-income countries. In other words, economic growth has not in the past made countries run balanced budgets and reduce their debt-to-GDP ratios, and there is no reason to assume that this will be different in the future.

The situation of countries that are weighed down by crippling debt is often presented as an argument for economic growth. And indeed, it is difficult to deny that Greece, Ireland and other overindebted countries will depend on economic growth in order to avoid even worse consequences for their societies. However, it would be wrong to generalize this relationship in the sense that sustainable public finances generally require economic growth. Rather, economic growth should be seen as a medicine that these financially injured countries need right now but that need not be given to countries with healthy debt levels, just as a moderately indebted household does not depend on a salary increase in order to pay down its mortgage.

International competitiveness

The idea that an economy's competitiveness depends on economic growth is particularly common among politicians, but it is poor economics. The very idea of the competitiveness of nations (as opposed to the competitiveness of companies) is ambiguous, and it is often not clear what people mean by it. If competitiveness refers to a country's ability to run a current account surplus, it would be clearly wrong to suggest that this depends positively on economic

---

[1] cf. IMF World Economic Outlook database,

http://www.imf.org/external/pubs/ft/weo/2012/02/weodata/ download.aspx

growth, as any international economics textbook will clearly demonstrate. Turning the argument around, some people argue that economic growth depends on a current account surplus, and this argument appeals by its seemingly simple arithmetic: for a given level of imports, the higher the level of exports, the higher GDP will be. However, since the current account is the *difference* between exports and imports and since the level of imports cannot simply be assumed to remain constant, a high current account surplus may equally well be the result of weak import demand rather than of export strength. A current account can therefore coexist with economic stagnation and in particular with high unemployment.

What these people probably mean is that sustaining a current account surplus depends on a country's ability to innovate and produce competitive products, but this requires innovativeness rather than economic growth. Whether a current account surplus is desirable in the first place is another matter that cannot be discussed here, but it should be clear that a current account surplus by one country necessarily implies a current account deficit of exactly the same size by some other country. Running a current account surplus can therefore never be a viable strategy for all countries together.

The environment

What about the relationship between the environment and economic growth? It certainly is not black and white: as material affluence takes hold, people typically also experience a drastic improvement in the quality of their natural environment, such as cleaner air and rivers and orderly waste disposal. The immediate benefit for people's quality of life is something to be welcomed. However, two problematic phenomena remain: first, to the degree that the improvement of the local environment is the result of exporting polluting industries to other countries, the problem is merely shifted somewhere else. Second, economic growth is empirically associated with an increase of energy and resource consumption and of carbon emissions. With the current pattern of consumption, this means that in a world in which all countries have reached material prosperity, local environments would probably be pretty clean and enjoyable, but climate change would be dramatic and certain natural resources would be heavily overused and dry up.

It is true that economic growth can be resource-neutral or even resource-saving on a conceptual level. After all, economic value in the sense of GDP can take the form not only of stuff – cars or mobile phones – but also of immaterial goods, such as insurance policies, theater plays or most kinds of services. Moreover, technological progress can reduce the amount of resources required to manufacture a given consumption good (thanks to energy saving inventions or the recycling of materials). A society can therefore grow economically and at the

same time reduce its ecological footprint. This scenario is referred to as absolute decoupling (of economic growth from resource use) in the literature and offered as a way to reconcile economic growth with ecological sustainability.

While the practical possibility of absolute decoupling is controversial, we need not wait for this debate to be resolved (if it ever can be) to know what needs to be done: as long as the world's ecological footprint is unsustainable, and as long as the richest societies have disproportionately large ecological footprints, it is simply a matter of fairness for those living in material affluence to make a true effort to reduce their resource hunger and their greenhouse gas emissions. In doing so, they will rightly want to make sure that unemployment remains low and that other conditions for wellbeing are met, but they should not make it conditional on keeping economic growth at past levels. After all, even if absolute decoupling is feasible, the ecological footprint will shrink even faster if economic growth, and with it consumption, are reduced, or even inversed, in addition to any resource-saving technological progress or substitution of material goods by services.

Challenges for a no-growth economy

Even if the principal concerns against a no-growth economy can be put to rest, some challenges remain for an economy that does not experience economic growth.

The first challenge has to do with expectations. In a society that has been made to expect a permanent increase in living standards, economic stagnation will lead to disappointment. What is more, people may not only feel emotionally disappointed, they may even have planned for a future of ever increasing incomes, and without economic growth they may not be able to service their mortgages or pay back their college debt. They may also start looking for a better job offer, just to find out that the only jobs that pay more take a high toll on their job satisfaction or on their family lives. The problem of disappointed expectations is of course not so much an argument for economic growth as it is an argument against raising unjustified expectations of economic growth. Still, one needs to pay close attention to the ramifications of growth expectations before taking the path down economic stagnation. Otherwise, one risks triggering another financial crisis and other severe macroeconomic imbalances.

The second challenge has to do with the tendency of economic progress to lead to a gradual increase in the prices of services relative to those of material goods. This effect, known as Baumol's cost disease (Baumol and Bowen, 1965), results from the simple fact that the potential for labor-saving innovations is limited or nonexistent in most services, while it is considerable in many industrial processes. At the same time, hourly wages in the service sector need to increase

at roughly the same pace as in the industrial sector in order to keep attracting employees. Tourists observe this effect when they realize that in a high-income country, the local price of a memory card for their digital camera is roughly equal to, say, the price of one restaurant meal while in a low-income country, the price of a memory card is equivalent to the price of three restaurant meals.

Assuming that a no-growth economy will not stop innovating, the cost disease will continue. One serious implication of this is the fact that most government services have a limited potential for labor-saving innovations. This means that, e.g., to maintain a given level and quality of public education, the government will have to increase expenditures for education because teachers' wages need to increase in line with hourly wages in other sectors. (There will be no moderating effect on expenditure from a reduction of working hours because maintaining the quality of education would not be achieved if the total amount of hours worked by teachers was reduced.) As a consequence, the government will have to increase the tax intake on a stagnant GDP year after year just to maintain a given level of education and other services. While this need not be a problem in a theoretical perspective, it becomes a problem if people for whatever reason resent a continuous increase of the tax rate, or if they are not willing to pay more in taxes than a psychologically salient threshold such as 50%. Privatizing education or other government services such as health care will of course not make any difference to the underlying structural change but simply shift the problem from the public to the private sphere, with all the advantages and disadvantages this entails.

The third challenge relates to the effects of a deliberate increase of production costs on international competitiveness. A country that implements strict environmental regulations, e.g. ambitious carbon emissions policies, will increase the cost of production for domestic companies. To the degree that the industries that are affected by this cost increase are exposed to international competition, they will obviously suffer a competitive disadvantage with the consequence that their market share will gradually go to foreign competitors. This implies that the intended positive environmental impact will not materialize and that the affected industry will suffer a rapid loss of jobs and of knowledge.

In theory, this problem can be avoided in one of two ways. Either the cost-increasing measures are adopted by a large group of countries that cooperate in monitoring and enforcing these rules (as attempted through the Kyoto protocol), or through so-called Border Tax Adjustments through which imports are taxed and exports subsidized in proportion to the domestic increase in production costs. However, both approaches face substantial political and administrative challenges.

Another challenge may arise to the degree that people are subject to an international demonstration effect: their desires and aspirations increase not only when they see that they neighbors and compatriots upgrade their living standards with time-saving appliances or fascinating smartphones but also when they are exposed to materially superior lifestyles on television. As a consequence, the fact that the latest generation tablet computer quickly becomes a widely owned consumption good in some countries would diminish the appeal of outdated models worldwide. If this effect is actually at work, a voluntary slowdown of economic growth in some countries may give rise to a feeling of being left behind materially if other countries continue speeding ahead. People in slowed-down economies will either be unable to buy the latest gadgets, or they will buy those gadgets and have fewer resources left for good education and healthy lifestyles.

A further reason governments may have to pursue economic growth has to do with geopolitical influence. A country's GDP clearly increases its clout in the international arena. A rich country has more say in some international institutions in which votes depend on financial contributions; it has more bargaining power in bilateral negotiations; and it has more resources to build up and maintain military power. Economic heavyweights may be those who are most concerned about this benefit of economic growth. Of course, seen from a global perspective this is just a zero-sum game in which the geopolitical advances of the respective countries should largely cancel each other out, but this insight does not provide a reason to give up the goal of economic growth for an individual country.

Another factor that is occasionally attributed a central role in the debate on economic growth is the current monetary system (with debt-based fiat money and fractional reserve banking). Basically there are two distinct but related arguments: first, that the current monetary system *drives* economic growth in the sense of exerting pressure on companies and individuals to earn ever higher profits in order to service their debts and pay interest. Second, that a debt-based monetary system *requires* economic growth in order to avoid a financial crisis because debtors would be unable to service their debts without economic growth. These two arguments are not mutually exclusive, of course. However, both of them are contested, and the debate on the possibility to reconcile economic growth with a debt-based monetary system is ongoing. This question should at this point in time be flagged as important, but it would be premature to come to a verdict regarding the suitability of the current monetary system. If it were established that the current monetary system is actually incompatible with zero economic growth, this would be a strong reason to move on to a more flexible monetary system. How this could look like and which advantages and

disadvantages different arrangements would bring with them would be a challenging question.

Is affluence relative?

It is tempting to describe the lives of most people in high-income countries as "affluent" in the sense of providing more than is necessary to satisfy all human needs. Indeed, the typical Swede, Japanese or US citizen need not worry about food, shelter, education and healthcare. When people in "affluent" living conditions increase their spending – as they have been doing all along –, then they seem to be satisfying insatiable (and morally questionable) *wants* rather than *needs*, with many observers attributing the desire to acquire ever more goods to the influence of advertising and a consumerist culture.

However, there is an alternative explanation for the insatiability of "affluent" consumers, one that emphasizes the need of social inclusion. To satisfy this need, an individual requires material resources, and the amount of resources required depends on the living standard that is prevalent in one's community or peer group. A substantial share of expenditures is influenced by this desire to be a respected member of one's community, ranging from leisure activities and status goods to standards of generosity and education choices. The old Adam Smith was entirely aware of the material relativity of this need when he observed that leather shoes and linen shirts were a precondition for social respect in England of his time even though they had not been regarded as necessities in Roman times (Smith, 1979/1776, p.870).

This carries an important lesson: even if advertisement, consumerism and greed have a role to play in explaining the insatiability of material desires, people would still have a reason to aspire for an ever higher income without these factors, namely their need for social inclusion. They may want to have a higher income for the best of reasons, such as being able to be more generous towards friends and providing a good university education for one's children. Of course, seen from the perspective of society as a whole, the desire to move up on the scale of social inclusion is a zero-sum game, but from any individual's perspective this may remain a sensible and to some degree even a noble objective. This also implies that while it may make sense to talk of societies being affluent in the sense that any further increase in economic potential will not provide any net benefit, it would be wrong to conclude that all or even most individuals within such a society are affluent in the same sense.

Yet, even if the individual's desire for ever more consumption for social reasons is understandable, the fact remains that there may be no benefit for society as a whole of increasing consumption, but that there may very well be net costs of increasing consumption in terms of the ecological burden on future generations.

Hence, the innocence of the social motive for increasing consumption should not be an excuse for a society's failure to contain this consumption spiral.

Apart from the ecological costs of ever increasing consumption, a further increase in the high-income countries' purchasing power will have the effect of further bidding up world market prices of food, oil and other commodities. While this may be beneficial for some producers of these goods, it may be catastrophic for those whose incomes do not increase at the same rate. As in many other contexts, the resulting increase in income inequality can have painful consequences for the already vulnerable. For this group, a deceleration of economic growth in high-income countries may be a significant relief.

Towards freedom from the imperative of economic growth

There are many ways in which an economy can grow or not grow, some of which are desirable and others objectionable. A low-income country will have different reasons for a high-growth scenario than a high-income country, for which a no-growth scenario may be more attractive and legitimate overall. It would be preposterous to prescribe individual countries whether they should or should not grow economically and by how much they should grow or shrink their economies. But there can be no doubt that societies are worse off when they are forced to have economic growth than when they are free to choose whether economic growth should be part of their conception of truly good development. Perhaps the growth-advocates are actually right that, as things are now, a society that fails to have economic growth will be punished by the comparative logic of global competition. If that is so, however, we should make it our top priority to limit the domain of the laws of competition and to reclaim our freedom to decide on our future.

References

Baumol, W. J. and Bowen, W. G., 1965. On the Performing Arts: The Anatomy of Their Economic Problems. *The American Economic Review* 55(1/2), 495–502.

IMF, 2010. *World Economic Outlook, April 2010: Rebalancing Growth*. Washington, DC: Internat. Monetary Fund. (World economic and financal surveys, 2010).

Kuznets, S., 1934. *National Income, 1929– 1932: Letter from the Acting Secretary of Commerce Transmitting in Response to Senate Resolution No. 220 (72D CONG.). A Report on National Income, 1929– 1932. 73rd U.S. Congress, 2d session, Senate document no. 124*. Washington, D.C.

Layard, R., 2005. *Happiness: Lessons from a New Science*. New York: Penguin.

New Economics Foundation (nef), 2010. *21 Hours. Why a shorter working week can help us all to flourish in the 21st century*. London: nef.

Smith, A., 1979/1776. *An Inquiry into the Nature and Causes of the Wealth of Nations*. Oxford: Oxford University Press.

Stiglitz, J. E., Sen, A. K. and Fitoussi, J. P., 2009. *Report by the Commission on the Measurement of Economic Performance and Social Progress*. Paris. URL: http://www.stiglitz-sen-fitoussi.fr/documents/rapport_anglais.pdf.

Wilkinson, R. G. and Pickett, K., 2010. *The spirit level: Why Equality Is Better for Everyone*. London: Penguin Books.

Chapter 17: Ecological Diversity and Resilience

— Eric Zencey

Introduction

Ecological diversity and resilience are definitive qualities of healthy ecosystems, the networks of relations between and among life forms and their physical environment that hold humans in their complex webs and that produce and maintain themselves through their use of nutrients and sunlight. As can be seen in any review of the history of failed civilizations, healthy ecosystems are necessary to the maintenance of human society (Diamond, 2005; Homer-Dixon, 2006). Participation in human society, in turn, is essential to individual human wellbeing and happiness; involuntary separation from fellow humans is always punishment, and it's a very rare individual who manages to survive, let alone thrive, without any social connection or economic interaction with others. Thus, human happiness and wellbeing clearly depend on healthy ecosystems.

That dependence is more than aesthetic (though there are some humans whose happiness and wellbeing are augmented by contemplating or otherwise experiencing life in its manifold variety) and is more than moral (though here too, there are some humans who could not consider themselves well or be happy if their lives depended on the extirpation of other life or the degradation of healthy ecosystems). The dependence of human happiness and wellbeing on ecological resilience and diversity is substantial and fundamental. As water is to a fish—the medium through which it moves, through which it gains sustenance, and into which it excretes its wastes—nature is the ground-of-being for economic life, a context so omnipresent and far-reaching that most economic theory simply ignores it, much as fish never speak to each other of "water."

To ask policy makers to take ecological resilience and diversity into account in their decisions about economic development is to ask them to employ new ways of thinking—a new development paradigm.

Domain description

Ecological diversity describes the variety of different forms of life that are present in a particular ecosystem. Very generally, the more species the better; ecosystems tend to evolve toward maximum feasible use of the energy available to them, and this usually involves the colonization of differentiated energy niches by a variety of differentiated species (Odum and Odum, 1981). A reduction in the number of species can harm the functioning of ecosystems (MEA, 2003). Virtually all of Earth's ecosystems have been dramatically

transformed through human actions, which have become the largest threat to the continued existence of countless species. Changes in human behavior, therefore, are needed to preserve the planet's existing (anthropogenically depleted) stock of genetic diversity (UNEP, 2007).

Resilience in ecological systems can be measured as the time required for an ecosystem to regain capacity to produce biomass and to self-regulate following a disturbance (Dale et al., 2001; Folke et al., 2004). Many factors contribute to ecosystem resilience; diversity of life forms is one such factor, but is by no means the only one.

Humans benefit from healthy ecosystems through the provision of ecosystem services, discussed more fully below. Briefly, these range from the purification and delivery of water, to the recycling of nutrients and the building of soil fertility, to serving as the source of replenishable supplies of food (including protein), lumber and other biologically generated raw materials, and energy. One important group of ecosystem services is the moderation of climate and the effects of weather.

Because humans derive direct benefit from the various services provided by healthy ecosystems, and ecological diversity and resilience are definitive elements of healthy ecosystems, any effort to maximize human happiness and wellbeing has to take account of the contribution that ecological diversity and resilience make.

Existing sub-domains

The Gross National Happiness Index developed and used in Bhutan contains a domain of indicators that aim to do this. The domain holds four sub-indicators, three of which assess subjective perceptions of environmental matters (pollution, urban issues and individual environmentally responsible behavior) and one of which asks respondents to assess an objective condition (crop damage by wildlife).

Levels of pollution are, obviously, a crucial element in any environment's ability to contribute to wellbeing. The GNH instrument asks a series of questions to gather respondents' perceptions about pollution, which are ranked on a four-item scale from "not a concern," through "of some concern" and up to "a major concern."

The environmental responsibility indicator attempts to measure feelings of personal responsibility and care for the environment, and its four-point scale runs from "highly responsible" to "not at all responsible." Information gathered on this item could be used to assess the success of efforts to reinforce

ecologically responsible behavior or to diagnose deterioration in environmental responsibility, though survey results may be subject to inherent problems. Few people consciously and purposely maintain a disjunction between their beliefs and their behavior, and most people want to believe they behave appropriately. Given this, questions that ask for self-assessment of environmentally responsible behavior and attitudes are likely to have a high rate of false or inappropriately positive responses unless the target demographic has a high capacity for critical self-awareness. Ignorance of what constitutes environmentally appropriate behavior may lead to inaccurate self-scoring as well.

Given the tendency of people to avoid dissonance between behavior and belief, and the difficulties individuals face in changing ecologically inappropriate behavior in a built world that assumes a high level of resource use, attempts to promote environmentally responsible behavior through education may have the unintended consequence of encouraging the intended audience to ignore or consciously reject the message--and all additional information about environmental concerns that is consistent with it (Thorgersen, 2004). Thus, a public education campaign may have the perverse effect of encouraging public ignorance.

The Urban Issues sub-indicator is intended to assess the success of policies promoting sustainable urban development, which is one of the major objectives of the Bhutanese government (Ura et al., 2012). It solicits responses about traffic congestion, the quality of urban green spaces, whether streets are pedestrian friendly and the degree of urban sprawl. Rapid urbanisation has both positive and negative impacts on human wellbeing; with city life comes improvement in some areas of wellbeing (such as access to health care and benefits from use of civic infrastructure), but these are to some degree offset by undesirable aspects of urbanized life. Positive impacts of urbanization are collected within other domains of the GNH survey.

The Wildlife indicator collects information on damage to crops, which has been a growing concern in Bhutan, and which can have significant effects on the happiness and wellbeing of people whose lives and livelihoods are closely connected to the success of harvests on small farms. Concern about crop damage can also disrupt sleep patterns and create anxiety and insecurity about economic wellbeing (Ura et al., 2012).

Two questions on the presence and absence of damage and the severity of damage are used to discover whether wildlife damage to crops is a constraint on farming and where the damage falls on a scale ranging from "a lot" to "not at all." This indicator is specific to rural populations. Its influence in the overall

measurement of Gross National Happiness is complemented by the Urban Issues indicator which applies to urban dwellers.

With these four subindicators forming the total of GNH's assessment of the environmental impacts of economic life (and of human activity in general), GNH as presently structured is incapable of measuring ecologically sustainable happiness or wellbeing. As Ura, Alkire, Zangmo and Wangdi say in an overview of GNH, "Indicators in this domain in particular may be reconsidered for future GNH surveys to better capture the full complexity of the ecological system." (Ura et al., 2012, p.31) Reconsideration and development is desirable on several fronts.

First, the full complexity of ecological systems (and the effects of economic activity on them) would be better captured by disaggregating the category "pollution" into its major constituent elements, defined by the ecological sector they affect. Thus, a more detailed indicator would assess the rates or quantities of disposal of various types of harmful and/or non-biodegradable wastes into the air, into water, and on land. Additionally, the category "pollution" could be expanded to include any unwanted or harmful environmental phenomenon imposed as an externality on innocent others: into this category would go noise pollution, noxious odors, light pollution at night, and perhaps even aesthetically displeasing changes to natural and built environments. This is consistent with the concept of *commons* that provides one readily understandable frame of reference for approaching environmental damage: just as a river or a lake or a clean atmosphere are each a commons from which humans derive benefit, and which can be degraded by the unchecked and self-interested actions of individuals, so too can we think of silence as a commons, of visual access to the night sky as a commons, of a beautiful landscape or scenic viewshed as a commons, etc.

Proposals to use aesthetic criteria in making decisions about development often elicit protestations that ideas of beauty are completely subjective, and that therefore no property owner should be forced to submit to the aesthetic judgment of others. This logic would equally serve the opposite conclusion: because aesthetic judgments are subjective, no individual should be allowed to impose their individual aesthetic judgment on a community without community guidance, input and review. Aesthetic values are one criterion by which proposed development is judged under Vermont's development control law, discussed below.

Second, even with greater detail and expansion of the concept of "commons," measuring pollution levels affecting various kinds of commons would not, alone, give the sum total of humanity's negative impact on ecological processes.

Pollution is a stress on the sink services of the environment; there is also environmental degradation on the source side. These two footprints of the economy become clearer in the modeling of the economy done by ecological economics. Standard economic modeling conceives of the economy as a closed loop in which money circulates between households, businesses and governments in exchange for goods and services. Ecological economics, modeling the economy as a thermodynamic system, emphasizes irreversible throughput: the transformation of low-entropy inputs into high-entropy outputs (or waste), because in planetary and thermodynamic terms, all the physical products that the economy produces are but temporary incorporations of order (low entropy) that must inevitably succumb to rust, rot, decay and disorder. Thus, the two ecological footprints of the economy, on the uptake (source) and output (sink) side (Georgescu-Roegen, 1976; Daly and Farley, 2011).

Deforestation, soil depletion, desertification, loss of biodiversity, overharvesting of commercialized species and other unsustainable practices affect the environment's ability to contribute flows of inputs into the human economy. These "source service" disruptors thereby affect ecosystems' ability to support human happiness and wellbeing. Source-side diminishments should be counted as economic losses -costs -whenever development produces them.

Third, a revision to GNH's reliance on survey research methodology is appropriate in this domain. The achievement of a sustainable relationship between economic activity and ecosystem processes is not a matter of opinion but an objective, either-or condition: water is either clean enough to drink or it isn't, a commercial species either is or isn't harvested at a sustainable rate, energy sources are either sustainable in geologic/ecological time or they aren't. Survey methodology doesn't reveal environmental conditions; it reveals what people think about environmental conditions. (This in itself may be useful information, but it cannot measure the degree to which an economy approaches sustainability.) While it is true that some countries and regions have populations that retain a strong, primarily agricultural link to the ecosystems that support them, and which might therefore be in a position to assess ecosystem health with greater accuracy than other more urbanized populations, in many countries and regions much of the population is able to offer nothing more than uninformed (or media-manipulated) opinion on such matters. Even where survey of the perceptions of well-informed lay populations may lead to acceptably accurate results, the method is not ideal. Any time opinion is used as a proxy for fact the relationship ought to be tested regularly for accuracy, which means in this case that primary data about environmental quality would have to be collected in any case.

Finally, the GNH instrument cannot measure any cumulative, long-term environmental impacts if those impacts are not visible to and tracked by local residents. GNH methodology is not suited to assessment of such large and consequential phenomena as the effects of climate change or the loss of the ozone layer, both of which have the potential to affect human happiness and wellbeing dramatically.

Alternative sub-domains: redefining the problem

An appropriately ambitious set of indicators in this domain can be developed from a redefinition of the problem. The deterioration of the ability of ecosystems to contribute to happiness and wellbeing doesn't arise simply from pollution or from a lack of responsible behavior by individuals or as a problematic interface between farmland and non-cultivated nature, as is implicitly assumed by the sub-domains currently in use in GNH.

The problematic relationship between human culture and nature - the relationship that threatens to diminish the ability of ecosystems to contribute to happiness and wellbeing, even to the point of societal collapse – can be re-defined by using the concept of natural capital and a related concept, natural capital services.

By analogy to built capital (the machinery, tools, and physical wealth humans use to increase the productivity of labor in the production of economic value), healthy ecosystems can be seen as a stock of natural capital that provides a flow of services that contribute to human happiness and wellbeing.

Built capital provides useful productive services without itself being consumed in the process. It does wear out, thanks to the entropy process; this is why maintenance, repair, and replacement of capital investments are necessary, and why owners of such productive resources are well advised to set aside some part of the income they derive from those resources in order to fund restoration of depreciated value.

Natural capital has several advantages over built capital, including one enormous cost saving: a healthy ecosystem will self-repair. The maintenance of any complex system against the depredations of entropy requires the importation into that system of organized matter and energy that are deployed according to some form of design intelligence. Ecosystems resist entropic degradation, create biodiversity, and create biomass by using energy throughput derived from the sun to organize physical nutrients according to the design intelligence coded by evolution into the genes of their constituent elements (Keeling, 1898). Through their economic production humans create

value and wealth, and resist entropic decay in the things they value, in the same way (Zencey, 1985; 2012).

The concept of natural capital allows for a precise definition of what ecological sustainability is--a definition that is a clearer guide to policy than the commonly used Brundtland definition ("meeting the needs of the present without compromising the ability of future generations to meet their needs," (Brundtland and World Commission on Environment and Development, 1987), which is more a description than a definition. Just as no business is sustainable if it consumes its operating capital as income, no economy can sustainably deliver wellbeing and happiness to humans if it steadily consumes the stocks of natural capital on which it relies. Therefore: a measure of the economy's ability to deliver sustainable wellbeing must assess economic activity's net impact on stocks of natural capital and on the flows of ecosystem services we derive from them. Economic activity that reduces stocks of natural capital is in practice borrowing from the future in order that we might spend and consume today. (In the past, economic theory has justified this perpetration of injustice by incorrectly assuming that natural capital and built capital are infinitely substitutable for each other, which would mean that future generations would have no problem developing technologies that would allow them to cope with the reduction of ecosystem services that that our consumption imposes on them; Daly and Farley, 2011). Economic processes that leave natural capital stocks whole and healthy, or even augmented, secure the future happiness and wellbeing of humans.

Alternative subdomains: drawing from GPI

One indicator set that attempts to measure the health of natural capital stocks and flows is the Genuine Progress Indicator, which evolved from the Index of Sustainable Economic Welfare proposed by Daly and Cobb (1989). Specifically, among the elements that GPI measures are:

- Net change in forest acreage
- Net change in farmland acreage
- Net change in water quality
- Net change in wetlands acreage

Because GPI aims to produce a single number that stands as a better representation of economic progress than GDP, each of these changes is assigned a dollar valuation, an amount that is added to or (more often) subtracted from the account. In addition, the GPI measures some other environmental costs:

- Cost of noise pollution
- Cost of air pollution
- Cost of long-term environmental damage
- Cost of non-renewable resource depletion
- Cost of personal pollution abatement

GPI begins with a basic measure that is a component of GDP (Personal Consumption) and corrects it by adding benefits and subtracting costs, including environmental costs that GDP ignores. Because it is a monetized measure, each of its environmental sub-indicators consists of two distinct calculations: an objective variable (acreage of forest or wetland or farmland, linear or square kilometers of waterbodies in various categories of health, ambient decibel level, etc.) and a valuation (an estimate of the monetary value of costs imposed or ecosystem services gained or lost in that category).

While accurate measurement of the variable and meaningfully defensible estimates of the valuations are important to the utility of these measures, GPI retains enormous usefulness for policy guidance even if the monetary valuations attached to ecosystem services are understood to be approximations. GPI can be a valuable, albeit approximate, indicator of change in economic wellbeing as long as the method of approximation is consistent from year to year and region to region. GPI's variables are objective, and accuracy in their measurement is conceptually easy if sometimes costly to achieve. (New technologies, like Geographic Information Systems data from satellite telemetry, can reduce the cost of data collection considerably.) For some of the variables, less expensive proxy measurements can be used, as when "net change in forest cover" is used as a proxy for "net change in forest ecosystem services."

Estimates of valuation have distinct problems that are discussed below in a section on valuation methodology. And the GPI categories themselves could be improved. Briefly:

- "Net change in forest acreage" captures some of the costs of deforestation, but this subindicator would be made more accurate if it was disaggregated into component measures. Forests come in different types - hardwood, softwood, rain forest, etc. - each with characteristic kinds and amounts of various ecosystem services. The economic cost of lost forest acreage would thus vary with type of forest. Also, between "fully forested" and "clear cut" lies a range of forest densities, with a corresponding variation in level and kind of forestry ecosystem services. Appropriately detailed field work combined with inference from GIS data would make this indicator more precise than the either-or condition of forested or not. In such a disaggregation, particular attention might be

paid to the difference in valuation of forest under sustained yield management and forest under other management regimes. Of particular and special interest is the range of variability in carbon sequestration as a forestry ecosystem service; because carbon sequestration is a scarce service globally, we'd expect a forest type that sequesters more carbon to be more economically valuable than one that sequesters less carbon. As our knowledge of the costs of climate change becomes more detailed, valuations of this forest service need to change accordingly.

- Within the GPI, "Net change in farmland" can be seen as a proxy measurement for several valuable conditions, including retention of soil fertility, which can be degraded by natural processes of erosion (which can be hastened, to be sure, by human act) and through practices that amount to soil mining: extraction, through harvest, of the carbon energy stored in fertile soil (Hyams, 1953). Direct measurement of net change in total soil fertility, or the ratio of soils whose fertility is being conserved to those whose fertility is being degraded, would be desirable. And since the world faces a difficult transition to post-petroleum agriculture with the advent and passage of peak oil, a case can be made that fertile farmland that is in organic (post-petroleum) production is more valuable, per acre, than farmland whose productivity is dependent on fossil fuel-based fertilizers and pesticides. Separate valuation of these two types of farmland would increase the accuracy of this subindicator as a measure of sustainable wellbeing.

- "Cost of noise pollution" has conceptual and practical difficulties that require attention. Noise pollution is increasing, as is awareness of the costs, both direct and indirect. A study published in 1995 by the World Health Organization reports that "about half of the EU citizens are estimated to live in zones which do not ensure acoustic comfort to residents" and "more than 30 % are exposed at night to noise levels exceeding 55 dB…which are disturbing to sleep" (Berglund and Lindvall, 1995).

Much current GPI practice relies on an index of urbanization to estimate noise pollution, on the assumption that noise is mostly a problem in urban areas, and specifically that the noise of vehicular traffic is a good proxy for all other forms of noise pollution. Neither assumption is particularly defensible, and both are unsuited to the experience of noise in relatively less developed countries and in rural areas. Low levels and small amounts of humanly generated sound can spoil the aural tranquillity - the silence that is a shared commons - of rural life. Technological innovation, such as computer applications that allow smart

phones to become GPS-equipped decibel meters, holds out the promise that inexpensive crowd-sourced information on ambient db levels could eventually be strong and sturdy enough to have policy applications (Maisonneuve, Stevens and Steels, 2009). An international project called "Noisetube.net," begun in 2008, collates and maps crowd-sourced noise data on its website.

Even with better data on environmental sound levels, computation of the monetary cost of noise pollution requires a foundation in assumptions and calculations that need articulation, elaboration, debate and consensus. For instance, if a regional economy depends on ecotourism, persistent sound from highways, chainsaws, even distant airplanes may have direct economic costs. Standards for setting valuations will need to be articulated by an appropriate authoritative body, most likely one drawn from the community of practice rather than from governmental organizations.

Many GPI compilations use cost data on noise pollution published in a World Health Organization study from several decades ago, and that study assessed just some of the health costs of chronic exposure to high levels of ambient sound (Cost of Noise Pollution 2012). Studies need to be done on other costs imposed on humans by other levels of noise (Bergund and Lindvall, 1995).

- "Cost of long-term environmental damage" can be used to capture the cost of climate change. Current GPI methodologies are unsatisfactory for this purpose. Insight might be gained from the cost computations made by insurers as they adjust their actuarial tables to the reality of changed weather patterns (Botzen and van den Bergh, 2008; Mills, 2005). The industry uses various climate models to estimate liabilities in our era of changing weather and is strongly motivated to predict those liabilities accurately. But not all costs of climate change are insurable losses. A community that loses its potable water supply to drought and summer heat; local businesses in an agricultural region that de-grows because of drought; increased consumer expense for air-conditioning; homeowner and civic expense to adapt storm water management to emergent realities; all of these represent an imposition of costs that are not in principle insurable. If in some regions and for some types of human development patterns the expected monetary cost of property damage from changing weather patterns could be shown to correlate meaningfully with other, non-insurable costs of climate change, it might be possible to extrapolate that correlation to other similar areas and

regions in order to develop more accurate measures of both the insurable and non-insurable costs of climate change.

- One problem that affects many of the monetary valuations that appear in GPI calculations is rooted in basic economic theory: if the supply of a good diminishes while demand for it remains constant or increases, its monetary (market) price will increase. Thus, scarcity of ecosystem services brings increasing marginal value to successive losses. This means that straight-line projection of the costs of ecosystem degradation is inappropriate; the values should asymptotically rise toward infinity as clean water, clean air, fertile soil, healthy forestland, etc. become increasingly rare—and rarity, here, can be local, regional, or global.

  But neither is a simple logarithmic function appropriate for all environmental costs. The first source of obnoxious sound in an otherwise quiet landscape degrades the silence-as-commons completely; the addition of a second source of sound does not have as large an effect and may in fact have no additional effect at all. But the addition of other sources of sound can eventually cumulate into levels of sound that again compound arithmetically or logarithmically. Similarly, bodies of water can have several different levels of impairment, corresponding to failure to meet standards for different uses: human drinking, human bathing, support of particular species of wildlife, etc. The first contaminant that places a waterbody into a particular impairment category can be conceived as imposing the cost of denial-of-service on humans, while additional units of contamination that do not change the impairment status of the waterbody do not, in principle, impose additional denial of service.

Intrinsic value of the domain

It's a mark of the severity of the ecological crisis facing humanity that it seems necessary to assert, and to offer authoritative citation for the assertion, that biodiversity and human wellbeing are inextricably connected because humans are an integral part of natural ecosystems. Biodiversity sustains the human food supply, supports delivery of the clean air and water that humans need to survive, and increases the possibilities for human adaptive use of nature's time-tested designs, including formulations for compounds and extracts that either serve as or inspire human medicines (Benyus, 2002). Biodiverse regions have greater prospects for economic development and biodiversity contributes to cultural and spiritual enrichment (CBD Health and Biodiversity, 2012).

Ecosystem resiliency allows ecosystems--providers of ecosystem services crucial to humans--to recover from exogenous and endogenous shocks (including the

enormous exogenous shock of climate change, which may bring changes to which the most resilient of ecosystems cannot adapt). Studies suggest that individuals who see the care and restoration of ecosystem resiliency as a social value worth supporting have a generally stronger sense of connection to other humans and stronger sense of their dependency on the land and on local nature. Each of these correlates with better health and higher levels of wellbeing (Forestry commission, 2003). The web of psychic and physical connection between self, other and land is an essential component of many traditional cultures, and helps account for the longevity of those cultures as they are otherwise sorely strained by contact with developed, industrial-commercial cultures. That web of connection is also a shared value that is consciously cultivated in newly developed "ecocultures," such as transition towns, in developed nations (Transition Town network, 2012).

Evidently, it is possible for some humans to experience wellbeing and happiness in isolation from the natural world. Because this is so, whether or not the health of ecosystems can be said to make an intrinsic contribution to human happiness and wellbeing depends on the mindset of the humans involved.

For humans who live their lives distant from nature, who are ecologically illiterate or who accept the mistaken, infinite-planet premises of standard economic theory, much damage to and even loss of ecosystems and their services will not immediately register as a significant decrement to their happiness and wellbeing. The contribution to wellbeing and happiness that ecosystems offer would, for these people, be entirely instrumental and not at all intrinsic.

For those humans who take pleasure in beholding natural forms and systems, who are alive to their own dependence on them, or who see their relationship to other life on the planet in moral and ethical terms, ecosystem health has great intrinsic value. When such people become aware of how those systems are being degraded, damaged and destroyed by human activity, that diminishment of ecosystems and their services is cause for alarm, anxiety, and sorrow.

This diminishment of happiness and wellbeing is even greater for humans who have either transcended or not succumbed to the anthropocentric species narcissism offered by contemporary commercial culture. These humans find intrinsic value in ecosystem health because they embrace a bio-egalitarian view in which every life form has an equal dignity and an equal right to exist, to compete for resources, and to flourish according to its nature. If all life forms are ontologically equal, their preservation has enormous intrinsic value.

Extrinsic value of the domain

It isn't necessary to adopt a bio-egalitarian mindset in order to find value in ecosystem resilience and biodiversity; these qualities have instrumental or extrinsic value for humans.

Meta-macroeconomic value: saving civilization

Traditional economic theory is systematically a-temporal and a-historical (Zencey, 1997). Because of this, it does not offer a level of analysis that allows appreciation of the largest of the benefits that accrue within the domain of Ecological Diversity and Resilience. When a temporal dimension is added to economic analysis by integrating environmental and economic history (an approach that could be called meta-macroeconomic, Zencey, 2008), it becomes obvious that healthy ecosystems are the foundation of civilization. No civilization can survive the loss of its root in nature. Thus, the qualities measured by indicators in this domain ultimately have an extrinsic, or instrumental, value equal to the value of civilization, which many civilized people would peg as infinite.

Macro- and microeconomic value: ecosystem services

At the macro- and microeconomic levels, the instrumental value of healthy ecosystems is obvious and relatively easy to specify. Degradation of ecosystems through pollution and contamination of air, water and land creates human health problems, which can be measured, and imposes defensive and remedial costs, which can be measured. Absence of green space affects human physical and psychological health, which can be measured. Compared to unhealthy ecosystems, healthy ecosystems offer larger contributions, over time, to the production of goods and services that humans seek, such as harvests of lumber, fish, game and agricultural produce and extractions of water from flows and reservoirs and aquifers; all of these can be measured. Ecosystem diversity increases ecosystem resilience, reducing the risk of sudden loss of these contributions to human wellbeing; the diversity of ecosystems can be measured, and the risk of ecosystem collapse can be estimated.

The concept of ecosystem service gives one framework for articulating the instrumental values provided by nature and its ecosystems. Several different schemas exist for classifying ecosystem services, though they do not disagree on the substance of what those services are.

One widely cited and influential paper (Costanza et al., 1997) fixed an approximate value for world ecosystem services, estimating them conservatively at US$ 16 - 54 trillion per year, with an average of US$ 33 trillion per year, compared to a global GNP of around US$ 18 trillion a year. The paper, which synthesized existing studies and reported a few original calculations,

looked at 17 distinct ecosystem goods and services for 16 distinct biomes. The categories:

- Regulation of atmospheric chemical composition
- Regulation of global temperature and climate processes
- Regulation of effects of storms and other natural phenomena
- Regulation of hydrological flows
- Storage and retention of waters in aquifers, reservoirs, soils, etc.
- Erosion control
- Soil formation
- Nutrient cycling
- Waste treatment and storage
- Pollination
- Biological control of plant and animal populations
- Habitat for economically valuable species
- Raw material for extraction (lumber, fuel, fodder)
- Genetic resources
- Recreational opportunities
- Cultural (aesthetic, artistic, educational, spiritual, etc.) opportunities

A Millennium Ecosystem Assessment (MEA) report issued in 2005 groups these services into four categories, which it labels "supporting," "provisioning," "regulating," and "cultural." (MEA, 2005) A suggested revision to the MEA categories by Kumar et al. reduces the possibility of double counting and suggests relabeling "supporting" services as "habitat" services (de Groot and Kumar, 2010).

The monetary valuation of ecosystem services

Setting monetary valuations for ecosystem services is becoming increasingly accepted but remains controversial. Some critics object to the practice on ontological grounds, noting that it is wrong, or at least metaphysically dubious and perhaps ultimately dysfunctional, to extend the valuation systems of the human economy to encompass Nature, of which humans and their economies can only ever be a subset; extending the valuation system of the part to encompass the whole seems like a perpetuation of the problem rather than a path toward a solution. Other critics note that ecosystem service valuation is an inexact science, subject to wide variation and notably different results from different methodologies, and that it cannot successfully value some services. (What, for instance, could possibly be the monetary valuation of an incremental increase or decrease in an ecosystem service that is infinitely valuable, like the protection afforded to all life by the ozone layer?)

Defenders of ecosystem service valuation point out that new methods and new thinking are needed if we are to achieve a new result, the preservation of enough ecosystem services to sustain civilization. The effort to keep nature and its values from being absorbed by commercial and economic systems of valuation by appealing to human altruism (i.e., asking consumers to reject market signals and their own financial self-interest) amounts to a call for something like a religious or at least a moral and ethical transformation of the dominant human culture on the planet. In the decades that environmentalism has been styled as a moral force, it has achieved some successes but has come nowhere close to establishing civilization on a sustainable footing. A call to save civilization (and thereby preserve the possibility of continued enjoyment of high levels of human wellbeing and happiness) through moral transformation is less likely to succeed than a call to "get prices to tell the ecological truth" so that the *economical* choice in any market is also an *ecological* choice. Nature has already been absorbed by commercial culture, the defenders of ecosystem service valuation point out; a refusal to put a monetary value on ecosystem services merely means that the default value will continue to be zero, which is clearly wrong.

In the past, environmentalists and conservationists aimed to put natural values beyond the reach of commercial, monetary considerations; this was the avenue to their preservation. That strategy led to some notable successes in the past century, as some landscapes were preserved from development and some species saved from profit-driven extinction by appeals to morality (i.e., it is wrong to cause other sentient beings pain and suffering or to prevent their kind from sharing the planet with us); to powerful symbolism (e.g., the purity of mothers' milk and the vitality of the US national symbol, the bald eagle, were factors contributing to a US ban on use of DDT); to deeply held religious beliefs (e.g., all of God's creatures deserve an equal chance to live and thrive, even if humans have supposedly been given "dominion" over them for instrumental use). But appeals to such value systems have not succeeded in producing anything like a general respect for the integrity of ecosystems or the voluntary human restraint that would be necessary to achieve a sustainable relationship between humans and nature.

Moneyed interests drive ecosystem damage, and moneyed interests understand the language of money. To preserve ecosystem values it may be necessary to speak the language of the people whose behavior and outlook stand most in need of change.

Metaphysical objections and linguistic concerns aside, as a practical matter ecosystem health is destroyed through human decision-making, and if humans are to make economically rational decisions those decisions must be based on

accurate assessment of expected costs and expected benefits. Ecosystem service valuation allows those decisions to include a category of cost that has not heretofore entered into economic decision making. For better or worse, monetary valuation is a widely shared frame of reference in our increasingly globalized market culture. As another report prepared as part of the UN Millenium Assessment put it:

> Economic valuation offers a way both to value a wide range of individual [ecological] impacts (some quite accurately and reliably, others less so) and, potentially but controversially, to assess well-being as a whole by expressing the disparate components of wellbeing in a single unit (typically a monetary unit). It has the advantage that impacts denominated in monetary units are readily intelligible and comparable to other benefits or to the costs of intervention (DeFries and Pagiola, 2005).

Such valuation, the report notes, "can also be used to provide information to examine distributional, equity, and intergenerational aspects" of the relationship between ecosystem health and human wellbeing.

Interaction of ecology and good governance

One underappreciated extrinsic value of healthy ecosystems is visible in the interaction of variables in this domain with variables in the domain of good governance. Whatever else it is, good governance has to be governance that secures the ongoing existence - the sustainability - of the society that is being governed. Thus, one criterion of good governance on a finite planet is management of public commons for the general benefit of citizens. These commons include not just air and water, but more generally many, if not all, of the ways in which the ecosystems of the planet provide source and sink services for human economic activity. Good governance must come to mean effective, equitable and sustainable administration of the various commons that contribute to wellbeing.

One commons that is not often conceived of as such is the economy, the primary instrument through which humans materially interact with their physical environment.

Conceiving of the economy as a common asset of society that is not essentially different from natural common assets like clean air and clean water helps to bridge the conceptual gap between culture and nature, economy and ecology, by pointing to yet another avenue of their integration. It also helps re-establish the role that government and justice plays in securing the social and political context in which economic activity takes place - a role that is not always

credited in societies that seek to liberalize trade and markets. In an era in which government intervention into the economy has strong ideological opposition, conceiving of the economy as a commons can help justify the intervention of public authority into economic affairs to maintain the common asset while promoting a public good that is not by any means automatically produced by unregulated, "free market" systems: the delivery of the maximum possible sustainable well-being to humans and their communities.

If that avenue of connection between good governance and ecological health is clear, less easily discerned is how that relationship runs the other way: healthy ecosystems are the foundation of our current notions of good governance. But the connection is equally durable and real. The basic conceptual foundations of modern democracy - the egalitarian concepts of the worth and dignity of each individual, and the notion that political, social, economic and cultural freedoms allow humans to achieve the fullest expression of their individual selves and their common humanity - emerged in the eighteenth and nineteenth centuries on a planet significantly different from the one we have today. The notion that individuals have a right to be let alone in any matter that doesn't affect others is a product of a time and a place - and a balance between nature and culture - in which human acts were thought to be incapable of damaging the planet and its ecological systems. Because the human population was small and its economic activity had not yet been amplified by fossil fuel use, the realm in which individuals could exercise prerogative, unregulated choice and freedom of action was large. Since that era, many of the ecological systems of the planet have been destroyed, degraded or distressed by human presence and activity. This represents an existential challenge to the theoretical and physical foundations of western democracy.

To generalize: the human experience of freedom is a dependent function of the distance between what culture takes from and discards into nature, on the one side, and what nature can sustainably give to us and absorb from us, on the other. Our notions of political freedom, along with many of the fundamental elements of our political and economic institutions, trace to a time when the distance between these two things seemed large, because the planet seemed infinitely fecund, infinitely generative, and infinitely absorptive. Today, with a globalized economy that is budgeted up to (and beyond) the absolute limits of sustainable production, that buffer zone in which human freedom flourished has disappeared.

We live now on a Factory Planet, not a Garden Planet. And a Factory Planet offers no room to do anything differently; life in a factory approaches the totalitarian condition in which all behavior that is not compulsory must be

disallowed. A factory is no place to insist on a right to privacy, a right to act on one's own volition, a right to participate in the decisions that affect one's life.

The largest extrinsic value of healthy ecosystems capable of hosting human culture, then, is the potential - not always realized - for civil liberty and democratic government (Zencey, 2012; 2009).

Traditional public policy

Worldwide, environmental policy is often grounded in one or more assumptions that are unsupportable:

Environmental values are one kind of economic value, which societies can purchase in greater amount when they are wealthier.

This is the assumption behind the Environmental Kuznets Curve, a supposedly empirical relationship between levels of pollution and levels of national income. The EKC holds that as national income (as measured by GDP) rises, levels of pollution at first increase, then reach a peak, then decline, as some of the newly created wealth is used to "buy" environmental quality. The idea has "intuitive appeal" for those whose standard economic theory defines environmental values as a subset of all economic values. (Standard economic theory acknowledges that nature has economic value because people will pay to experience it or to use some of its services.) But studies purporting to find the EKC's inverted-U relationship between wealth and pollution are deeply flawed. Most do not isolate and control for "pollution haven" effects—the export of negative environmental impacts from wealthier countries to less developed countries. Most seem to have been undertaken in an effort to prove the validity of the EKC, and manipulate assumptions and data combinations until the resulting curve takes on the foreordained shape. And all of them select proxy measurements (they focus on particular pollutants) rather than measuring ecological degradation in general. Finally, if we accept that green house gases are a pollutant, the EKC leads us to the absurd conclusion that the richest countries that the planet has ever seen in its history are still not wealthy enough to purchase the environmental good called "climate stability," and that more wealth generation (fuelled by something other than fossil energy, presumably) is what is needed to solve the problem (Stern, 2003).

These justifiable criticisms are sufficient to thoroughly discredit the notion that there is an automatic dynamic by which pollution levels at first rise then decline with increasing wealth. Still, the majority of economists have yet to explicitly reject the EKC, and the logic of it remains embedded in much environmental policy. Anytime there is talk of not being able to afford environmental regulation, or of needing to have economic growth first and environmental

quality later, the specter of the EKC is casting its pall of bad economic science on the discussion (Daly and Farley, 2011).

Degradation of common assets (like air or water quality) can be prevented by establishing property rights in the common asset, which gives owners of the asset the incentive to maintain it because preservation and protection of the asset will be in the owners' own economic self-interest.

This is the lesson learned from much human experience, ranging from the Enclosure Acts in England through Unitary Reservoir Management in the U.S. oil industry up to international agreements apportioning tonnages of catch from various blue-water fisheries. It does seem that establishing property rights solves the problem, but, as Daly and Farley (2011) point out, not all commons can be successfully enclosed. (It would be difficult to assign ownership shares in the ozone layer) Often enclosure is accomplished only through extinguishing the claims to usufruct of a significant number of beneficiaries - that is, property rights are established (by claim, seizure, negotiation or grant) for one or a few and others who have legitimate claim to benefit from use of the commons are excluded. Closing commons through establishing property rights regimes has not and probably cannot solve all environmental problems, and depending on how it's done it can create inequity and injustice.

Innovation and technological change are capable of dealing with any environmental limit or problem.

This testament to the faith that "more technology can solve the problems that technology has given us" is not expressed explicitly as frequently as it was in earlier decades but it has been retained through inertia in much economic theorizing and policy practice. It's evident in the effort to devise a technical fix to its carbon-intensive transportation system - automobiles that operate on electricity - rather than developing mass transit and pushing for the kinds of zoning and urban development changes that would make automobile use less necessary. Similarly, proposals to "geo-engineer" our way out of climate change or to genetically engineer crops to survive drought are silent testimony to this faith. (The implicit premise seems to be that nature is more malleable than are the human political systems in which powerful interests maintain their ability to foul the commons.)

Can technology always save us? While innovation and technological change have accomplished a great deal in terms of increasing the efficiency with which humans use resources, and while they have allowed some nations to derive more per-capita economic wealth from smaller per-capita ecological footprints, that process of progressive change is not and cannot be infinite: there are limits to technological development that can't be transcended or engineered into irrelevance. No matter how inventive humans turn out to be, they will never invent their way around the first and second laws of thermodynamics, the laws

that forbid perpetual motion. The failure of the discipline of economics to adopt the thermodynamic model of the economy proposed by Nicholas Georgescu-Roegen (1976), Herman Daly (1977) and others signals the discipline's retention of this assumption, which is crucial to maintaining a faith in the possibility of perpetual economic growth.

Regulatory "tailpipe plugging" can be sufficient to reduce environmental harms to tolerable levels, and tort law is sufficient means of rectifying cases not (yet) covered by regulation.

When the planet seemed large and expansive in relation to human acts and works, environmental policy could be reactive. Demonstrable harms led to legislation or to pursuit of damages through civil law. A thermodynamic model of the economy suggests that these amount to tailpipe plugging: they attempt to regulate the performance of a machine, the economy, by limiting its capacity to exhaust its detrimental wastes. Experience has shown that engines are more effectively and efficiently regulated through metering of inputs rather than choking down outputs, and that insight might yet be applied to the machine that is an economy.

Environmental policy is clearly distinct from monetary and fiscal policy.

The international economy that threatens to render the planet inhospitable to humans is lubricated by a monetary system that allows private banks to create the money supply by creating debt, and this system requires perpetual economic growth in order to maintain even a semblance of stability. The logic: Debt is a claim on the future production of real wealth by the economy. The productive capacity of any economy is subject to physical limits, including resource constraints. Even if the planet were infinite, there would be physical constraints: production takes place in time using matter and energy, and because it is physical, the output of real wealth cannot be expanded as rapidly as can the completely virtual quantity "total debt." When debt grows faster than an economy can grow the means of paying it back, the economy has a structural need for some form of debt repudiation (Daly, 1977; Benes and Kumhof, 2012). Inflation is one sort of debt repudiation, and it is created by governments running budget deficits - in essence, private debt generated by the economy is converted into public debt.

If nations are required to balance their budgets, then the necessary debt repudiation will come as a crisis: foreclosures, defaults, stock market crashes, pension fund wipeouts, the loss of paper assets (expected future real wealth) in any form. (It is worth noting that when government budgets can only be balanced through austerity measures that impose penury on citizens and lead to civil disturbance, the choice is between two paths that lead to social dislocation and crisis.) Loosening environmental regulations can stimulate the rate of growth of the economy, staving off such crises at the cost of compromising the

environment's ability to contribute to present and future human happiness and wellbeing. The better solution to the problem of periodic debt crises is one that preserves the health of the environment, and it consists in bringing the creation of debt under control so that growth in debt doesn't outpace the global economy's ability to grow enough real wealth to pay it back. (And, in a global economy that already uses an unsustainable flow of matter and energy inputs, any sustainable growth must come from the application of the third factor of production, design intelligence. Daly and Farley (2011) call this "development" to distinguish it from foot-print expanding growth.) Fiscal, monetary and environmental policies are thus intimately linked (Dyson et al., n.d.).

Population policy is not a necessary component of environmental policy.

In one commentator's apt phrase, population policy is the third, fourth, and fifth rail of environmental politics; the subject has simply disappeared from public discourse, which seems to operate on a tacit consent that all talk of limiting population growth to ensure a higher standard of sustainable wellbeing for humans on the planet is simply off limits. Several large factors help account for this. First, infinite-planet theorists ranging from free-market enthusiast Julian Simon to socialist Karl Marx succeeded in establishing an elite consensus around the idea that (in Marx's case) labor is the source of all economic value or (in Simon's case) there are no limits to human ingenuity; the two doctrines are functionally identical, and historically led both communist and (supposedly) free-market capitalist powers to oppose population control measures. Second: Catholic Church doctrine continues to define the most effective forms of family planning and birth control as sinful, and other religions and cultures expressly reject family planning methodologies and information campaigns. Third: Among mammals, the determinant of the rate of population growth is what happens in the wombs of fertile females; because a lone male can impregnate many females, the number of males of the species can be - and often is - irrelevant to population growth. Humans have social systems that tend to tie impregnators to impregnated, male to female, but at the biological level, control of population growth for a mammalian species is control of the female reproductive system. To many people, human population policy looks to be an attempt to exert social control over women's bodies.

Other assumptions that underlie much traditional environmental policy have been criticized and are beginning to lose their status as part of the tacit valuations and beliefs behind "the Washington Consensus," the foundation of a globalized world economy. These newly contentious assumptions include:

Because technology can solve any problem that humans create by using technology, the planet is effectively infinite for economic purposes, which means the marginal cost of lost ecosystem services is close to zero, and therefore environmental

externalities are not significant disruptors of the efficiency of market-based allocation systems.

This unspoken assumption is in the process of being questioned and discarded. Increasingly, political processes and policies are taking environmental externalities into account or there is official support for doing so. Thus, in 2010 the President of the World Bank, Robert Zoellick, told a conference on biodiversity that "We need to assist…economic agencies to measure 'natural wealth'…The value of services we derive from ecosystems shouldn't be assumed to be zero," and he went on to call for calculation of the value of lost ecosystem services in making decisions about development (World Bank, 2010). Even so, no western world leader has yet said "perpetual economic growth is impossible."

Economic growth as traditionally defined is always and everywhere a good thing.

It is becoming increasingly obvious that economic growth and development have ecological and social consequences, some of which are costs; as Daly and Farley (2011) have noted, when those costs exceed the expected benefits, economic growth becomes uneconomic growth.

Energy is a commodity like any other, and market forces are capable of resolving energy shortages if given enough time and a loosening of environmental constraint.

In the 2004 edition of their *Principles of Economics,* Robert H. Frank and Ben S. Bernanke (2004) told student readers about the gas crises of the 1970s but reassured them that rising prices eventually cleared the market and led to additional oil prospecting and production: "in short, market forces solved the energy crisis" (p.529). That remarkable conclusion suffers from an ignorance of the laws of thermodynamics and a failure to appreciate a crucial distinction between stock and flow: the market price of oil is determined by supply and demand, and the supply is determined by the rate at which we extract a flow from a fixed stock. A stable or declining price for oil doesn't mean we've solved our economy's energy problem; it simply means that we are pumping a finite stock of stored solar energy out of the ground fast enough to match or overmatch rising demand for it. An appreciation of the economy as a thermodynamic machine and a respect for the laws of thermodynamics leads to the conclusion that energy is not a commodity like any other, but a fundamental factor of production (along with matter and intelligence).

Knowledge of the economic history of humanity, as filtered through this thermodynamic lens, suggests that limited energy supply (usually in the form of solar energy captured from green plants through agriculture and forestry) has in nearly all places and times been the constraining factor to the human production of wealth and enjoyment of wellbeing (Homer-Dixon, 2006; Crosby, 2007; Hall and Klitgaard, n.d.). The contemporary era is defined by the

discovery of comparatively vast quantities of stored solar energy in the form of oil, coal and gas, and by the relatively rapid development of technologies that exploit this energy. These temporarily removed energy from its status as limiting factor, but only a myopic, temporally parochial perspective could mistake the Fossil Fuel Era for the permanent condition of humanity. This mistake on the part of economic theory has been supported by another assumption that is in the process of being challenged and changed:

Nature is an unchanging given, immune from being affected by economic activity, which means economic analysis does not need to include the environmental feedback loop represented by the measurement and valuation of ecosystem services.

Geophysical sciences have known for more than a century that this isn't true (Marsh, 1864). But economics was, and by and large remains, an ahistorical discipline - a discipline that studies dynamic change within relevant social systems but ignores history, the aggregation of all change over time. At best the discipline seems able to grasp a kind of comparative statics, comparing conditions at time "A" to conditions at time "B". (Georgescu-Roegen suggested that this ahistoricity of economics was due to its unwillingness to accept the economic import of the entropy law, for the entropy process is "time's arrow," the only physical law of universal application that is unidirectional in time.) In this, the discipline of economics perpetuates a pre-Darwinian metaphysics; it encodes a vision of nature as lying outside of culture, essentially unchanged, unchanging and unchangeable. The growing use of the concept of ecosystem services represents a subversion of that ahistoricity, for it proceeds from an acknowledgement that the flows of those services can vary with the results of human decision making.

Other major research findings relevant to public policy

The academic literature on valuation of ecosystem services as an element of human wellbeing is vast and growing, and no attempt will be made here to survey or summarize it. An extremely useful survey of the field can be found in DeFries and Pagiola (2005), which characterizes valuation methodologies, giving their appropriate applications, their data requirements and their limitations.

Table 2.6. **Main Economic Valuation Techniques** (Adapted from Pagiola et al. forthcoming)

Methodology	Approach	Applications	Data Requirements	Limitations
Revealed preference methods				
Change in productivity	trace impact of change in environmental services on produced goods	any impact that affects produced goods	change in service; impact on production; net value of produced goods	data on change in service and consequent impact on production often lacking
Cost of illness, human capital	trace impact of change in environmental services on morbidity and mortality	any impact that affects health (e.g., air or water pollution)	change in service; impact on health (dose-response functions); cost of illness or value of life	dose-response functions linking environmental conditions to health often lacking; underestimates, as it omits preferences for health; value of life cannot be estimated
Replacement cost (and variants, such as relocation cost)	use cost of replacing the lost good or service	any loss of goods or services	extent of loss of goods or services; cost of replacing them	tends to overestimate actual value
Travel cost method	derive demand curve from data on actual travel costs	recreation	survey to collect monetary and time costs of travel to destination; distance traveled	limited to recreational benefits; hard to use when trips are to multiple destinations
Hedonic prices	extract effect of environmental factors on price of goods that include those factors	air quality, scenic beauty, cultural benefits	prices and characteristics of goods	requires vast quantities of data; very sensitive to specification
Stated preference methods				
Contingent valuation (CV)	ask respondents directly their willingness to pay for a specified service	any service	survey that presents scenario and elicits willingness to pay for specified service	many potential sources of bias in responses; guidelines exist for reliable application
Choice modeling	ask respondents to choose their preferred option from a set of alternatives with particular attributes	any service	survey of respondents	similar to CV; analysis of the data generated is complex
Other methods				
Benefits transfer	use results obtained in one context in a different context	any for which suitable comparison studies are available	valuation exercises at another, similar site	can be widly inaccurate, as many factors vary even when contexts seem "similar"

Table 5. *Main economic valuation techniques*

Most of the work of ecosystem service valuation consists of quantifying biophysical relationships: how, for instance, deforestation diminishes water quality, and how that change affects the health of humans and other species who derive benefit from that water source. Causal chains are traced and data are used to gauge impacts. The assignment of monetary valuation to ecosystem services lost (or, more rarely, gained) is the final step.

Each of the approaches given by DeFries and Pagiola has seen extensive use and a considerable literature exists on their application. They report that many of the valuation studies are cataloged in the Environmental Valuation Reference Inventory Web site maintained by Environment Canada (Environment Canada, n.d.).

The choice of valuation method is in some measure a choice of result, and the range of variation in those results undercuts the implicit claim that ecosystem service valuation is a technical exercise that produces objective results. But

ecosystem service valuation is not, on that account, a completely subjective, arbitrary, or unprincipled practice. As with elements of standardization in the machine age, appropriate standards can be generated by a non-politicized community of practice. The American Society of Mechanical Engineers set screw pitch standards based on tensile strengths and coefficients of friction of metals and the needs of various applications. The choice between metric or "English" standardization was a cultural one, and left-loosen right-tighten was essentially arbitrary. Standardization of valuation methodologies is likely to be accomplished with a similar mix of elements.

Recommendations

What not to do

A variety of actions and policies need to be stopped or modified in order to do ensure contribution of healthy ecosystems to happiness and wellbeing, respectful of all forms of life. These include:

- Do not mistake GDP to be a measure of economic progress, and do not pursue maximum GDP as a policy goal, because GDP fails to take into account the economic benefits that are lost when ecosystems are degraded or destroyed;

- Stop allowing the issuance of private-bank, debt-based money, which allows the sum total of debt in the global economy to grow faster than the economy can grow the real wealth needed to pay it back. This is an ecological issue because the distance between the two values is the primary driver of unsustainable, eco-system damaging economic growth;

- In investment calculations, stop discounting future benefits from resource use, since the practice encourages exploitation of resources in the present and leads to unsustainable exploitation of resources that might be exploited sustainably;

- Stop subsidizing further development of fossil fuel use through extending and improving fossil-fuel-intensive infrastructure. Stop direct subsidies to fossil fuel industries (including the petroleum, coal, highway construction, and automotive industries);

- End the silence on discussion of population policy as a reasonable and necessary component of the effort to achieve and maintain high levels of human happiness and wellbeing;

- End the "race to the bottom" by which developing countries are encouraged to compete with each other for jobs and economic wellbeing by reducing the burden of environmental and worker health and safety regulations.

- Stop hamstringing the development of solar and renewable energy industries by creating a climate of uncertainty through on-again, off-again subsidies and tax credits.

- Stop presuming that of the three factors of production — matter, energy and intelligence — intelligence is the trump that can overrule any resource limit; which is to say, stop presuming that economic development can always eventually become non-zero-sum or "win-win," bringing benefit to all involved.

- End property rights on life in any form, whether human, animal or vegetal.

What to do

The ultimate goal is to build something the world has never seen: an ecologically sustainable human civilization that has a high degree of material wellbeing that is widely and equitably shared. Success requires nothing less than reversing several centuries' worth of momentum that has accumulated behind our current perpetual-growth, infinite-planet economic practice - a belief system and a practice that take for granted humanity's access to low cost (high Energy Return on Energy Invested) energy sources (Hall and Klitgaard, n.d.).

It's a daunting task, but the effort may receive geophysical assistance as supplies of high EROI energy dwindle, forcing on humanity a return to an economy that operates on current solar income. Meanwhile, there are leverage points at which concerted effort for change will have amplified effect. Some of those leverage points are particularly relevant to the domain of "Ecological Diversity and Resilience."

Because our current ecologically unsustainable system is not the accidental product of sound social and economic theory, but the product of infinite-planet thinking in social and economic realms, some of the most powerful leverage points lie not in the concrete realm of policy but in the abstract realm of changing our social capital — the shared understandings and publicly held knowledge that built our infinite-growth economy. Specific policy proposals, then, are keyed to changes in the underlying principle that the policy seeks to enact. The list is by no means comprehensive.

Principle 1. Establish that the purpose of an economy is not the maximum throughput of resources, or even the maximum creation of wealth, but the maximum creation of sustainable human wellbeing and happiness. Establish that the consumption of natural capital as income is unsustainable, anti-social, self-defeating, uneconomic, and just plain stupid.

> *Policy 1.a.* Establish a comprehensive set of indicators of human happiness and wellbeing that assess the health of all the forms of capital that are important to human happiness and wellbeing, and which specifically treats degradation of natural, social and cultural capital as cost items in national accounting systems.

> *Policy* 1.b Establish an international body of experts, on the model of the American Society of Mechanical Engineers, to articulate, promulgate, curate, set standards for and as necessary develop and modify the elements of that indicator set.

Principle 2. End the competitive race-to-the-bottom by which nations, regions, and various political subdivisions compete with each other for development that brings employment opportunities.

> *Policy 2a.* Establish minimum standards for worker safety, health, and dignity, along with minimum standards for environmental protection, that are consistent with production of maximum human wellbeing, and which specifically recognize that work with dignity is essential to human well-being.

> *Policy 2b.* Enforce these minimum standards through tariffs or outright trade embargoes imposed on countries that fail to meet them.

Principle 3: Establish in national law, international law and as a principle human right the principle that that no person, group of persons, agents, corporations or governments should be allowed to profit from imposing ecological, social, cultural or economic harm, damage or loss on any other humans or groups of humans.

> *Policy 3a:* Support the general adoption of the model offered by Ecuador, which in 2008 adopted a national constitution that specifically acknowledges that nature has the right "to exist, persist, maintain and regenerate its vital cycles, structure, functions and its processes in evolution" and which establishes governmental authority to forbid the private diminution of ecosystem services.

Policy 3b: Establish authoritative administrative systems that use broad criteria to judge development proposals to ensure that proposed development neither seeks nor is likely to allow some humans to profit by imposing harm, damage or loss on others. The criteria should specifically acknowledge that denial of ecosystem services constitutes a loss. Whenever such anticipated externalized losses outweigh the anticipated externalized gains that would be brought to the community by the development proposal, the criteria should require that the proposal be rejected. One model for such a development review process is Act 250 in the US state of Vermont. This law mandates a process of careful review of development proposals (originally, by citizen panels), ensuring that they meet ten distinct criteria. Under those criteria, development must not result in "undue" water or air pollution; must not "unreasonably burden" any existing water supply; must not cause "unreasonable" soil erosion, "unreasonably dangerous or congested conditions" in transportation modes, have an "undue adverse affect" on "scenic beauty, historic sites, or natural areas," or "imperil necessary wildlife habitat or endangered species" (Argentine, 2008). Case law has determined what does and doesn't count as "unreasonable" and "undue." As the administration of the law evolved over several decades, the direction of change points toward (but hasn't fully achieved) this insight: in an ecologically straitened world, it is no longer reasonable to suppose that one individual's pursuit of self interest should be allowed to impose loss of ecosystem services on the community as a whole (Courtney and Zencey, 2012).

Principle 4: Reform those elements of the economy, like our debt-based monetary system, that encode the presumption that infinite economic growth is possible and which push the system toward production of uneconomic growth. Since privately issued, debt-based money is the primary driver of a financial system that demands continual economic growth as a condition of economic stability, establish as a principle the right of public authority to retain sole control over the creation and issuance of money.

Policy 4a: Phase out fractional reserve banking through a series of stepped increases in reserve ratios until the maximu of 100% is reached, and forbid private creation of other instruments of debt-based money.

Policy 4b: Subnational and local governments create local banks and local currencies, capturing seingiorage (the profit that comes from creating a public good, money) for the public treasury.

Principle 5: Policies to protect ecosystem diversity, ecosystem health, and the continued delivery of ecosystem services to humans can no longer be reactive

but must encode the precautionary principle (Daly and Farley, 2011). It is therefore necessary to augment (and eventually to displace) environmental regulation's focus on reactive tail-pipe plugging and tort law with policies designed to address environmental problems at their source: the expansion of the economy's two ecological footprints, on the uptake and on the output side.

Policy 5a: A "green tax shift" from taxing value-added processes (like the income tax on labor) to taxing throughput of scarce resources (including use of the scarce "sink" capacity of ecosystems) exemplifies this approach.

Principle 6: Establish zero population growth as a public policy target.

Policy 6a: worldwide, education of women has the single largest net effect in suppressing birth rates. Support education of women as a civil and social right, and as one means toward achieving sustainability through population stability.

Policy 6b: Because the annual number of unplanned pregnancies is roughly equal to the rate of population increase, support dissemination of birth control technologies and family planning information worldwide.

Principle 7: Establish a 100% renewable energy standard as a desirable public policy goal.

Policy 7a: provide trade privileges and other incentives for nations that make progress toward or achieve this while establishing disincentives for continued reliance on fossil fuel.

Policy 7b: Establish a clear protocol, such as that advocated by Campbell (1996) and Heinberg (2006), for assisting nations in tapering off their use of petroleum, and for equitably apportioning the reduced flow of petroleum among competing national claimants.

Principle 8: Climate change is the largest and most obvious, but by no means the only, environmental externality imposed by our current economic system. This relentlessly unfolding catastrophe requires immediate and far-reaching action.

Policy 8a: Continue to press for an enforceable limit on green house gas emissions, and even in the absence of such an agreement offer incentives and rewards to nations that behave as if such an agreement were in place.

Policy 8b. Design and implement a climate-change knowledge-generation and -dissemination strategy and a climate-change awareness program for all sectors of society (including, but not limited to, early education).

Policy 8c. In the wake of severe weather events (presumably aggravated by climate change), condition relief aid on participation in the principles and practices of the New Economic Paradigm (abandonment of GDP, institution of Green Tax Reform, agreement to the Oil Depletion Protocol, etc.).

For several centuries, political economists of varying stripes have celebrated the mutual reinforcement between free markets and democratic systems and between economic growth on the one side and growth in individual empowerment and civil liberty on the other. Faith in these conjunctions are part of the social capital—the mutual trust, shared valuations, shared perception of reality and publicly held knowledge (Zencey, 2012, adapting Goodwin, Nelson and Harris, 2009)—that characterizes modern democracies and allows them to function. But these conjunctions are conventional and historical, not absolute; they are the product of a particular set of circumstances—cheap fossil energy, small human population, and a relatively untrammelled planet with immense stocks of natural capital—that cannot be replicated in planetary history. In an era of ecological constraint, democracy and unregulated markets tend to be antagonists, not complements, for as a system designed for infinite growth meets environmental limits its dynamics shift from win-win to zero sum, and as damage and loss are imposed on less politically powerful participants elites find ways to insulate their system from popular pressures (Zencey, 2012). Faith in democratic processes is similarly challenged by sustainability, which is an objective condition that is unaffected by the majority's perception of it. Even in the absence of popular support for establishing a sustainable economy, continuation of an unsustainable economy is not an option; by definition, unsustainable systems do not last, but revert to sustainability. To ensure that the sustainable system we eventually achieve is one that retains democratic and participatory forms, several additional imperatives must be met:

Principle 9: To the maximum feasible extent, policies implementing the New Development Paradigm need to be articulated, designed and implemented through broadly inclusive egalitarian consultation and engagement, to help build the social capital that successful adoption will require, and to reflect the role that good governance (including democratic and participatory forms) plays in contributing to human happiness and wellbeing.

Policy 9a: These processes should guarantee that all stakeholders are apprised of objective realities and the newly emergent, ecologically

grounded constraints that establish new criteria for wise statecraft and effective public policy.

Policy 9b: Additional conscious efforts to support the development of the social capital needed to achieve an ecologically sustainable democracy need to be undertaken. This social capital will be at odds with the social capital that supports infinite-planet, infinite growth economic policies; the ability of vested interests to subvert the creation of finite-planet social capital should be curtailed through limits on corporate political and issue advertising, on corporate donations to political campaigns, and on gifts and other valuable conveyances to elected officials. Countries that fail to meet standards for these protections should be sanctioned by the international community.

Policy 9c: In the effort to shape finite-planet social capital and promote sustainability, preference should be given to those strategies whose corollary lessons are compatible with sustainable democracy. Top-down prescription, along with opaque and distant decision-making, tend to teach political passivity; they devalue the role of voter as empowered decision-maker that is central to democratic theory. To support retention of democratic habits, extensive use should be made of participative action forums, co-production of relevant policy solutions (e.g. urban gardens, community bike paths and no-car days), peer-led methodologies, creative strategies (participative theatre, art) and transformative action methodologies. Citizen participation in the administrative processes outlined in policy 3b is necessary to prevent capture of that regulatory process by vested interests.

Policy 9d: Formal and informal communities of interest and other networks should be used to promulgate the shared valuations and publicly held knowledge that is necessary to and supportive of sustainable democracy.

Policy 9e: Ensure the participation in open public policy forums of local stakeholders engaged in the practical search for a sustainable economy, e.g. citizens associated with Transition Town Networks.

Principle 10: No act that imposes harm, damage or loss on others is truly private. On a crowded planet with an economy built out to and beyond its environmental limits, there may be no truly "private property."

Policy 10a: International property laws should be overhauled to harmonise them with the target of healthy ecosystems; where feasible, open access

regimes should be closed through appropriate assignment of property rights.

Principle 11: The knowledge and technical expertise needed by a post-petroleum society will resemble, in crucial ways, the knowledge and technical expertise achieved in non- or pre-petroleum societies. Exchange between practioners in each of these groups should be promoted and facilitated.

> *Policy 11a:* Governments and educational institutions should, through appropriate programming, support the interchange of ideas, information and experience between pre- and post-petroleum cultures. For instance, in Knox County Ohio, Kenyon College's Rural Life Center has promoted job sharing, socialization, and other opportunities for communication between Amish and organic farmers (Rural Life Center, n.d.). Strategies should be developed and implemented to promote the appropriate retention and transmission of knowledge systems that predate the petroleum era.

Barriers to policy adoption

The barriers are many and in some cases formidable.

- Ignorance

- Inertia

- Vested interests with the power to influence political processes and prevent change that would limit their ability to benefit financially by imposing harm and loss on others through private appropriate of common value, e.g. through ecosystem degradation.

- Pressure for austerity in public spending, which militates against increased public staffing to investigate and articulate policies aimed at achieving sustainability. (This pressure is both ideological and geophysical: advocates of smaller central government resist extending the reach of government to encompass new tasks, and as the EROI of oil declines, the economy has less net energy to fuel the creation of goods and services of all kinds, including governmental services.)

- Principles of national and cultural autonomy, which limit the ability to achieve top-to-bottom imposed movement toward a sustainable global economy.

Ignorance and inertia can be met with sustained rational argument. Other barriers have proven more resistant.

A concerted campaign to inform relevant publics, to encourage influential decision makers to re-imagine economic relations along the lines proposed here and to lobby decision makers to adopt elements of the program seems a reasonable strategy. Care should especially be taken to help influential people and decision makers to re-frame their experience in light of the concepts central to this program.

We can expect that the economies of the world will continue to experience the difficulties that come from infinite-planet practices encountering the limits of a finite planet, and those occasions of crisis will afford the opportunity to encourage these people to re-think their fundamental premises and entertain the idea of adopting the policies and outlook advocated here.

The change is facilitated when the alternative paradigm is ready-to-hand to help explain events that are otherwise confusing, unexpected, or inexplicable. In the effort to change the economic vision that currently guides national and international policy, the ecosystems of the planet will continue to be a strong partner, for they will continue to give evidence of the shortcomings of the old way of thinking.

In particular, development of a sturdy and comprehensive indicator set is a logical first step. The failures of GDP as an indicator of economic wellbeing are so obvious that the adoption of better measures can scarcely be resisted. An appropriate set of metrics will, when adopted, provide an inspirational framework for national policy that will drive other positive change.

Data and measurement for policy

Some of the analysis that could be offered under this heading was covered in the section on additional sub-indicators.

Additional data and metrics for measuring human wellbeing and happiness are offered by the Failed State Index, which could usefully be mined for this purpose. The Failed State Index is a production of a respected NGO, The Fund for Peace. Using a set of metrics the FSI evaluates the 177 recognized nations of the world for their levels of stability and capacity, ranking them on a scale from "least failed" to "most failed." The Fund for Peace reports a steady increase in the number of governments that have responded to the rankings by seeking ways to improve their standing or by using it as a component in policy decisions. The FSI is thus functioning as an alternative indicator system for

those governments. The Fund for Peace describes the methodology behind the Index in these terms:

> The Failed States Index is based on The Fund for Peace's proprietary Conflict Assessment Software Tool (CAST) analytical platform. Based on comprehensive social science methodology, data from three primary sources is triangulated and subjected to critical review to obtain final scores for the Failed States Index. Millions of documents are analyzed every year, and by applying highly specialized search parameters, scores are apportioned for every country based on twelve key political, social and economic indicators and over 100 sub-indicators that are the result of years of painstaking expert social science research (The Fund for Peace, n.d.)

The twelve major indicators in the FSI can be grouped into three broad categories: Social, Economic, and Political and Military. As can be seen from boxed text below, the categories and indicators offer significant overlap with GNH and GPI based assessments. This suggests that there is room for fruitful collaboration between the Fund for Peace and the work being done in pursuit of "Happiness and Well-being: Toward a New Economic Paradigm."

Social Indicators

Demographic Pressures — DP

Pressures on the population such as disease and natural disasters make it difficult for the government to protect its citizens or demonstrate a lack of capacity or will.

Includes pressures and measures related to:

- Natural Disasters
- Disease
- Environment
- Pollution
- Food Scarcity
- Malnutrition
- Water Scarcity
- Population Growth
- Youth Bulge
- Mortality

Refugees and IDPs — REF

Pressures associated with population displacement. This strains public services and has the potential to pose a security threat.

Includes pressures and measures related to:

- Displacement
- Refugee Camps
- IDP Camps
- Disease related to Displacement
- Refugees per capita
- IDPs per capita
- Absorption capacity

Group Grievance — GG

When tension and violence exists between groups, the state's ability to provide security is undermined and fear and further violence may ensue.

Includes pressures and measures related to:

- Discrimination
- Powerlessness
- Ethnic Violence
- Communal Violence
- Sectarian Violence
- Religious Violence

Human Flight and Brain Drain — HF

When there is little opportunity, people migrate, leaving a vacuum of human capital. Those with resources also often leave before, or just as, conflict erupts.

Includes pressures and measures related to:

- Migration per capita
- Human Capital
- Emigration of Educated Population

Economic Indicators

Uneven Economic Development — UED

When there are ethnic, religious, or regional disparities, the governed tend to be uneven in their commitment to the social contract.

Includes pressures and measures related to:

- GINI Coefficient
- Income Share of Highest 10%
- Income Share of Lowest 10%
- Urban-Rural Service Distribution
- Access to Improved Services
- Slum Population

Poverty and Economic Decline — ECO

Poverty and economic decline strain the ability of the state to provide for its citizens if they cannot provide for themselves and can create friction between the "haves" and the "have nots".

Includes pressures and measures related to:

- Economic Deficit
- Government Debt
- Unemployment
- Youth Employment
- Purchasing Power
- GDP per capita
- GDP Growth
- Inflation

Political and Military Indicators

State Legitimacy `SL`

Corruption and a lack of representativeness in the government directly undermine the social contract. *Includes pressures and measures related to:*

- Corruption
- Government Effectiveness
- Political Participation
- Electoral Process
- Level of Democracy
- Illicit Economy
- Drug Trade
- Protests and Demonstrations
- Power Struggles

Public Services `PS`

The provision of health, education, and sanitation services, among others, are key roles of the state. *Includes pressures and measures related to:*

- Policing
- Criminality
- Education Provision
- Literacy
- Water & Sanitation
- Infrastructure
- Quality Healthcare
- Telephony
- Internet Access
- Energy Reliability
- Roads

Human Rights and Rule of Law `HR`

When human rights are violated or unevenly protected, the state is failing in its ultimate responsibility. *Includes pressures and measures related to:*

- Press Freedom
- Civil Liberties
- Political Freedoms
- Human Trafficking
- Political Prisoners
- Incarceration
- Religious Persecution
- Torture
- Executions

Security Apparatus `SEC`

The security apparatus should have a monopoly on the use of legitimate force. The social contract is weakened where this is affected by competing groups. *Includes pressures and measures related to:*

- Internal Conflict
- Small Arms Proliferation
- Riots and Protests
- Fatalities from Conflict
- Military Coups
- Rebel Activity
- Militancy
- Bombings
- Political Prisoners

Factionalized Elites `FE`

When local and national leaders engage in deadlock and brinksmanship for political gain, this undermines the social contract. *Includes pressures and measures related to:*

- Power Struggles
- Defectors
- Flawed Elections
- Political Competition

External Intervention `EXT`

When the state fails to meet its international or domestic obligations, external actors may intervene to provide services or to manipulate internal affairs. *Includes pressures and measures related to:*

- Foreign Assistance
- Presence of Peacekeepers
- Presence of UN Missions
- Foreign Military Intervention
- Sanctions
- Credit Rating

Table 6. *The Failed State Index Indicator Set* **(Fund for Peace, n.d.)**

Monitoring

Progress in the adoption of sound policy in this area can be judged in two main arenas, which can be likened to measuring the performance of an engine by monitoring both its intakes and outputs.

On the output side, progress will consist in choking the exhaust, which can be measured as the increasing adoption of a comprehensive set of metrics that assess the ecological impacts of economic activity as part of its overall measure of happiness and wellbeing. Progress could be charted in reference to the number of nations that adopt such an indicator set; or the percentage of the world's population covered by that indicator set; or (ironically enough) the

percentage of world GDP that is encompassed under the new metric. Just as restricting exhaust flow is not the most effective way to regulate an engine's speed, establishing a comprehensive set of indicators of sustainable wellbeing is no guarantee that policies will be adopted that will maximize the positive elements and minimize the negative elements in that indicator set.

On the intake side, progress will consist in diminishing the forces that drive our economies into uneconomic, ecosystem-degrading economic growth. This will come as a result of the increasing adoption of an appropriate finite-planet financial system, one that no longer allows money to be created through the creation of debt. Here progress could be gauged in a similar manner: number of nations that have agreed to eliminate fractional reserve banking on a published schedule; or the percentage of the world's population who reside in nations that have made that commitment; or percentage of the world's money supply that is government-created rather than issued as debt-based money by the private banking system.

Conclusion

Because the ultimate purpose of an economy is to bring the maximum feasible amount of happiness and wellbeing to its participants, and because happiness and wellbeing depend on healthy ecosystems, an ecologically sustainable economy is not just a practical necessity in the long run but is also the only kind of economy that can achieve an economy's ultimate purpose.

The transition from an infinite-growth, GDP-based model to a steady-state, alternative-indicator-based model will not be an easy one. Vast energies have been employed in developing the current system, and entrenched interests benefit from it. In the past—before the planet reached its capacity to support human economic activity—those interests derived their benefits by meeting the needs and satisfying the wants of consumers. On a finite planet that hosts an economy too large for it, business as usual continues to meet needs and satisfy wants, but increasingly it imposes harm, damage and loss as a necessary element of doing so. The problem is not with markets as such or with ownership of productive resources as such; the problem is that a system designed for infinite expansion has reached real-world limits that were not anticipated and have been too long denied. Effective redesign of the system, adapting it to a finite planet, is needed, and the measures offered here are meant to provide the framework for such a redesign. Those who continue to benefit from business as usual—those who profit from imposing harm, damage and loss on others—are likely to marshall their considerable resources to resist elements of that redesign that cause them financial loss.

If this prospect is disturbing, there is some comfort, if also some additional cause for concern, in the thought that unsustainable systems do not last. We will have a sustainable economy in one form or another, sooner or later. The relevant question is, will we prepare sensibly for it? Implementation of a new development paradigm will minimize the amount of human pain and suffering in the future by securing from further degradation the biological diversity and ecosystem resilience of the planet. Failure to act will bring further reduction in the human carrying capacity of the ecosystems of the planet, condemning future generations to a meaner, mingier, stingier life.

Between a sustainable state and the world we occupy now lies the potential for a great deal of political and social upheaval. Wise statecraft would seek to minimize those upheavals; wise statecraft would adopt a New Development Paradigm.

References

Argentine, C. C., 2008. *The Act 250 Handbook.* Putney Vermont: Putney Press.

Benes, J. and Kumhof, M., 2012. The Chicago Plan Revisited. *IMF Working Paper WP/12/202,* at http://www.imf.org/external/pubs/ft/wp/2012/wp12202.pdf (June 7, 2013).

Benyus, J., 2002. *Biomimicry: Innovation Inspired by Nature.* New York: William Morrow.

Berglund, B. and Lindvall, T. eds., 1995. Community noise. *Archives of the Center for Sensory Research,* 2(1), 1-195.

Botzen, W. J. W. and van den Bergh, J. C. J. M., 2008. Insurance Against Climate Change and Flooding in the Netherlands: Present, Future, and Comparison with Other Countries. *Risk Analysis*, Vol. 28, No. 2, pp. 413-426;

Brundtland, G. H. and World Commission on Environment and Development, 1987. *Our Common Future.* New York: Oxford University Press.

CBD (Convention of Biological Diversity), 2012. Available at : http://www.cbd.int/convention

Campbell, C. 1996. The Oil Depletion Protocol. Available at http://richardheinberg.com/odp/theprotocol

Cost of Noise Pollution, Maryland Genuine Progress Indicator, 2012. Available from http://www.green.maryland.gov/mdgpi/10a.asp (22 May 2013).

Costanza, R., d'Arge, R., De Groot, R., Farber, S., Grasso, M., Hannon, B., ... and Van den Belt, M., 1997. The value of the world's ecosystem services and natural capital. *Nature*, Vol. 387, 15 May (p. 253-260).

Courtney, E. and Zencey, E., 2012. *Greening Vermont: The Search for a Sustainable State.* Thistle Hill Publications and the Vermont Natural Resources Council, Montpelier VT.

Crosby, A. W., 2007. *Children of the Sun: A History of Humanity's Unappeasable Appetite for Energy.* New York: Norton & Co.

Dale, V., Beyeler, S. C., 2001. Challenges in the development and use of ecological indicators. Ecological Indicators, 1, 3-10

Daly, H. and Cobb, J., 1989. *For the Common Good.* Boston: Beacon Press.

Daly, H. and Farley, J., 2011. *Ecological Economics: Principles and Applications.* Washington, DC: Island Press.

Daly, H., 1977. *Steady State Economics.* reissued 1991. Washington, DC: Island Press.

_____ 1980. The economic thought of Frederick Soddy. *History of Political Economy* vol. 12 n. 4, pp. 469-488.

de Groot, R. and Kumar, P., 2010. Estimates of Monetary Values of Ecosystem Services. In: P. Kumar, ed. *The Economics of Ecosystems and Biodiversity: Ecological and Economic Foundations.* New York: Routledge.

DeFries, R, Pagiola, S, et al., 2005. Ecosystems and Human Well-Being: Volume 1: Current State and Trends. Washington, DC: Island Press.

Diamond, J. 2005. *Collapse: How Societies Choose to Fail or Succeed.* New York: Viking.

Dyson, B., Greenham, T., Ryan-Collins, J. and Werner, R. A., n.d. Towards a Twenty-First Century Banking and Monetary System. a joint submission to the (UK) Independent Commission on Banking, n.d. (circa 2010), at http://www.positivemoney.org/wp-content/uploads/2010/11/NEF-Southampton-Positive-Money-ICB-Submission.pdf (June 7, 2013).

Environment Canada, n.d. Environmental Valuation Reference Inventory. Available at https://www.evri.ca/Global/HomeAnonymous.aspx

Folke, C., Carpenter, S., Walker, B., Scheffer, M., Elmqvist, T., Gunderson, L., Holling, C. S., 2004. Regime shifts, resilience, and biodiversity in ecosystem management. *Annual Review of Ecology, Evolution and Systematics, 35*, 557-81

Forestry commission, 2003. Available at : http://www.forestry.gov.uk

Frank, R. H. and Bernanke, B. S., 2004. *Principles of Economics,* 2nd ed. New York: McGraw-Hill.

Fund for Peace, n.d. The Failed States Index: Conflict Early Warning and Assessments. Available at http://www.fundforpeace.org/global/?q=program-fsi

Georgescu-Roegen, N., 1976. *The Entropy Law and the Economic Process.* Cambridge: Harvard University Press.

Goodwin, N., Nelson, J. A. and Harris, J., 2009. *Macroeconomics in Context.* New York: M. E. Sharpe, Armonk.

Hall, C. A. and Klitgaard, K. A., n.d. *Energy and the Wealth of Nations: Understanding the Biophysical Economy.* New York: Springer.

Heinberg, R. 2006. *The Oil Depletion Protocol: A Plan to Avert Terrorism, Oil Wars, and Economic Collapse.* Canada: New Society, Gabriola Island.

Homer-Dixon, T., 2006. *The Upside of Down: Catastrophe, Creativity, and the Renewal of Civilization.* Washington, DC: Island Press.

Hyams, E., 1953. *Soil and Civilization.* New York: Harper and Collins.

Keeling, J. H., 1898. *Quaero [Some Questions in Matter, Energy, Intelligence, and Evolution].* London: Taylor and Francis.

Maisonneuve, N., Stevens, M. and Steels, L., 2009. Measure and map noise pollution with your mobile phone. *DIY:: HCI -A Showcase of Methods, Communities and Values for Reuse and Customization,* Proceedings of the DIY for CHI workshop held on April 5, 2009 at CHI 2009, the 27th Annual CHI Conference on Human Factors in Computing Systems, April 4-9, 2009 in Boston, MA, USA, pp. 78 -82.

Marsh, G. P., 1864. *Man and Nature, Or, Physical Geography as Modified by Human Action.* Facsimile edition 1965. Cambridge: Harvard University Press.

Millennium Ecosystem Assessment (MEA), 2005. *Ecosystems and Human Well-Being: Synthesis*. Washington: Island Press.

Mills, E., 2005. Insurance in a Climate of Change. *Science* 308, 1040. 12 August.

Odum, H. T., and Odum, E. C., 1981. *Energy Basis for Man and Nature*. New York: McGraw-Hill.

Rural Life Center, Kenyon College, n.d. Family Farming. [webpage], Gambier, Ohio, http://rurallife.kenyon.edu/

Stern, D. I., 2003. The Environmental Kuznets Curve. *International Society for Ecological Economics Internet Encyclopedia of Ecological Economics,* at http://isecoeco.org/pdf/stern.pdf

Thorgersen, J., 2004. A cognitive dissonance interpretation of consistencies and inconsistencies in environmentally responsible behaviour. *Journal of Environmental Pyschology,* Vol. 24, Issue 1, pp. 93-103.

Transition Town Network, 2012. Available at : http://transitionnetwork.org

Ura, K., Alkire, S., Zangmo, T. and Wangdi, K., 2012. *A Short Guide to Gross National Happiness Index*. Thimphu: Centre for Bhutan Studies.

World Bank, 2010. World Bank Launches New Global Partnership to 'Green' National Accounts. *Press Release No.* 2010/155/SDN, Oct. 28, 2010.

Zencey, E., 1985. *Entropy as Root Metaphor.* Ph. D. thesis, Claremont Graduate University.

_____ 1997. *Virgin Forest: Meditations on History, Ecology and Culture.* Athens GA: University of Georgia Press.

_____ 2008. Transcending the Culture Wars: Environmental History as Meta-metanarrative. *Liberal Education,* vol 94, n. 2, pp. 42-47.

_____ 2009. Fixing Locke: Civil Liberties for a Finite Planet. In: P. Goggin, ed. *Rhetorics, Literacies and Narratives of Sustainability.* Routledge, pp. 180-201.

_____ 2012. *The Other Road to Serfdom and the Path to Sustainable Democracy.* Hanover: University Press of New England.

Chapter 18: Achieving Lasting Behavior Change

—Evgeny Osin and Ilona Boniwell

Sustainable happiness and the wellbeing of all life forms is a goal that all of humanity can surely agree on. Cross-cultural research suggests that people from diverse cultures and nations value happiness, and that most rate themselves as at least moderately happy (Diener and Diener, 1996; Veenhoven, 2010). Views differ on which specific forms and pursuits of happiness are the best ones, and to what extent it is good for individuals or collective agencies to pursue happiness explicitly. However, few would argue against the belief that it is good for all to experience their lives as both enjoyable and valuable.

It is impractical to try to achieve a positive societal change without balancing 'external' changes (in the conditions for wellbeing) with 'internal' transformation (in people's mental appreciation of the world around them). Thus we must proceed by combining 'outside-in' with 'inside-out' transformations, looking to ameliorate both external conditions and internal mental conditions. Making this combination more explicit should bring practical benefits in the form of citizen engagement with policy processes (desiring happiness, citizens will gladly cooperate with agencies that take this desire seriously) and more efficient strategies (less wasteful expenditure on factors that are bad or irrelevant for happiness).

Since happiness derives from interactions between our minds and our environments, policies aimed at increasing happiness must attend to those interactions. In practice, focusing on the external (rearranging our societies and applying science to as to manipulate resources and environments) tends to proceed separately from focusing on the internal (strengthening our mental abilities to achieve happiness by appreciating our social and physical environments). Throughout human existence, deliberate development has been mainly about removing discomforts and providing tangible 'objective' goods, particularly the material infrastructures and consumption practices associated with good living. Despite several centuries of astonishing global progress in life extension and in the provision of comfort and security, even today conventional public policy approaches do not rise to the parallel challenge of mental development. Governments, businesses, schools, and community organizations typically do not recognize any formal responsibility for helping people to experience and appreciate their lives as enjoyable and valuable or meaningful. So these psychological dimensions are typically addressed at relatively private and interpersonal levels, often helped by parents, teachers and counselors,

rather than made explicit at higher institutional levels in public planning and policy-making.

To summarise, we can attempt to enhance happiness in two ways, firstly, by focusing on the internal, one's state of mind, and secondly, on the external, environmental and relational factors.Recommendations throughout this report keep this duality in mind. Unfortunately, however, even the most advanced set of public policy recommendations is unlikely to have any impact unless these recommendations are endorsed both by policymakers and by target populations and are actually implemented both at the policy and individual level. The best information on the positive effects of happiness-conducive habits, such as mindfulness, minimising TV watching or exercise, will only have a very limited effect on the subsequent behaviour change at the population level. For instance, we may be impressed with studies demonstrating that exercise is more effective than medication as a depression cure (e.g. Babyak et al, 2000), yet again, this knowledge alone offers insufficient motivation for making a change happen. Partly, this is due to the fact that what is conducive to sustainable happiness may not be immediately perceived as pleasant. Largely though, research demonstrates that despite all expectations human do not often weight the costs and benefits of actions in a logical way, therefore not necessarily choosing and acting upon what can be seen as a rational choice (Dolan et al, 2010).

While the current blueprint may indicate areas for individual and collective behavior change, this may not be sufficient to achieve the desired objectives. Therefore, we would like to pay some attention to the problem of behaviour change, drawing on the latest research from the fields of psychology and behaviour economics (Dolan et al, 2010). Rather than a list of specific recipes concerning the possible ways to influence the behavior of individuals and communities, the ideas in the next two sessions will offer a wider outlook at the possibilities that can be considered when implementing policy.

Levels of information processing

A view of humans as rational beings that emerged during the Enlightenment era implies that providing reasonable arguments in favour of proposed change is sufficient to convince people to adopt new ways and thus to change their behavior. However, research shows that this is not always the case.

Firstly, people do not always process incoming information in a completely rational way. Cognitive and social psychologists distinguish between two levels of information processing as presented in Table 7 below.

Deep level of information processing	Surface level of information processing
Content of the message is considered	Form of the message and its emotional overtones are important
Rational arguments are analyzed and evaluated in a thorough and logical way	Heuristics are used to evaluate the message, such as reliance on its length or credibility of its source
Is more likely to happen when recipients are interested in the message	Is more likely to happen when recipients are indifferent
Is more peculiar to people with critical thinking skills	Is more peculiar to people low in critical thinking
Requires a large amount of attentional resource	Is likely to happen when recipients are tired or unwilling to devote attention to the message

Table 7. *Deep and surface levels of information processing*

This well-documented distinction between two different levels of information processing (Craik & Lockhart, 1972; Chaiken, 1980; Myers, 2010) suggests that policymakers and individuals who are the addressees of the new paradigm's policy recommendations are likely to perceive information differently, and the messages addressed to these audiences need to be constructed in different ways. For instance, in order to be more persuasive to policymakers, the recommendations need to make use of rational arguments with reference to existing evidence base, demonstrating both the benefits and the possible drawbacks and reservations associated with the proposed policies, discussing possible difficulties and cultural differences in implementation. Conversely, for instance, messages addressed to individuals in the electronic mass media are likely to be more effective when they are short, emotionally charged, and provide a brief easy-to-understand rationale without necessarily discussing the opposite position.

Secondly, *people do not always behave in line with the ideas that they rationally endorse*. Even if we achieve a change in a person's attitude towards a certain idea or action, this change does not guarantee at all that the person will subsequently behave in accordance with the newly adopted views. For instance, in a classical study by Darley & Batson (1973), divinity students, who were hurrying to give a lecture on the Good Samaritan, encountered a person in need of help on their way to another building. Contrary to the common sense expectations, the students were unlikely to help, even when a person exhibited obvious signs of distress. This study shows that even intense ethical training may provide little protection against unethical behavior in an everyday challenging situation.

In order to help people enact the values and attitudes that they endorse, situational factors can be adapted in ways that facilitate pro-social action. For instance, placing a charity donation box by a cash register where customers receive their change increases the amounts donated to charities by means of reminding people of the opportunity to donate and by providing such an opportunity within close reach.

To summarize, in order to develop policies that are both attractive and effective, we must take into account two different levels:

1. To address the *level of policymakers*, public policy recommendations have to be stated in ways that are effective to persuade policymakers and stakeholders, which is largely the position adopted by this report so far;
2. To address the *level of individuals targeted by the public policy*, the recommendations may benefit from making use of the existing knowledge of the different mechanisms of human behavior and of the ways it can be influenced in subtle but non-coercive ways.

The first level concerns the form that policy recommendations are to be presented in, in order to be attractive to politicians. There is a wide body of literature on the methodology of effective communication available on this question (e.g., Levine, 2006; Myers, 2010; Pratkanis & Aronson, 2001). As the current report mainly addresses this level, this issue does not require any further consideration. The second level concerns the content of policy recommendations, touching directly on the mechanisms of human behavior that become pathways of behavioral change, which is what will be discussed below.

Mechanisms of human behaviour

Economic models of human behavior have long relied on the assumption that people behave in rational ways. However, a wide body of research undertaken during the last 30 years has shown this not to be the case (Ariely, 2008). The process of behavioral decision-making (choosing between specific alternatives in specific situations) has been studied relatively well, with results that clearly show the influence of heuristics and cognitive biases (Kahneman, 2011), emotional processes (Ariely, 2008), and individual differences in attitude to choice (Schwartz, 2004) on economic decisions and on other choices that people make in the course of their daily activities. These behavioral economics models outline situational factors that underlie everyday consumer choices made during shopping, or media choices made while watching TV. However, the explanatory power of these models is generally limited to the context of a specific activity or situation, as they do not answer a more fundamental question concerning human motivation, *why people do what they do*? Why a specific person goes shopping at all on a specific day, instead of spending this

time learning something new, interacting with significant others, or helping someone in need?

These issues have been explored in psychological research of the principles of human behavior regulation. Psychologists have identified and described several different mechanisms that explain human behavior. These mechanisms appear interrelated and may function simultaneously, although some of them may prevail over others in specific situations or in certain individuals. These mechanisms are summarized in a model of multiple regulation by Leontiev (1999), who presented them as different possible answers to a question "Why did you do this?". These mechanisms are:

1) Needs ("Because I needed it"). Needs are powerful drivers of human behavior. Some needs are thought to be universal to all human beings, although the objects that satisfy them may differ, depending on situational or social context. Needs are usually classified into three groups: biological needs (such as the needs for food, sexual satisfaction, and shelter), social needs (such as the needs for belonging to a group, self-esteem, and being respected by others), and psychological needs that are peculiar to human beings. Theorists mostly differ in the definitions of the needs in the latter group, which includes, for instance, needs for self-actualization (Maslow, 1970), cognitive activity (symbolization, imagination, judgment; Maddi, 1998), having a frame of orientation and identity (Fromm, 1955), acting in self-determined ways (autonomy, competence; Ryan & Deci, 2000), being related to other people and the world (relatedness, rootedness; Fromm, 1955; Ryan & Deci, 2000), etc. Human needs are not fixed: they evolve as societies create new ways in which needs can be satisfied. They also evolve in the course of socialization and individual development.

2) Reactions to stimuli ("Because I was provoked"). Reflexes, or quick and involuntary reactions to stimul, are the basic mechanism of human nervous system. Although some of these reactions are inborn (e.g., sneezing, coughing), humans, just like higher animals, can be conditioned (by reinforcement providing reinforcement or punishment) to form new reactions. Early behaviorists believed that conditional reflexes were the principal mechanism of human behavior, suggesting therefore, that human behavior could be completely shaped and controlled from without (Skinner, 1938).

3) Habits, or dispositions ("Because that's what I always do"). The power of habit in driving our behavior was first described by James (1890). Most of the time humans act in habitual ways, relying on unconscious mechanisms to reduce the cognitive load, so that consciousness is only involved in difficult, new or particularly important situations. Habits are learned dispositions to behave in certain ways in specific situations. Habits can be modified either by

the person itself (which requires conscious effort), or by changes in the situation (old habits become inappropriate). Habits, together with biological givens (such as temperament), are the basis of personality traits (individual ways of behavior that are not specific to particular situations – Alport, 1961).

4) Social norms ("Because that's what I was supposed to do"). Like other social animals, humans are capable of imitating each other's behavior. But humans are also capable of acting in ways that conform to expectations of other members of the group, or society as a whole. Expectations shared by all the group members are called social norms, and a membership in a group is often contingent upon following its norms (Myers, 2010). Humans often act in line with the outside expectations out of fear of being rejected by referent groups or by significant others.

5) Personal meaning / values ("Because it was important for me"). In the course of individual development, a human being is able to transcend biological needs and social norms, arriving at the fundamental question of what's really important in life for him/her specifically (Frankl, 1988). Culture provides possible ways to answer this question in the form of values that are evaluated, chosen, and integrated by each person to become flexible and hierarchically structured guiding principles of behavior (Frankl, 1998; Maslow, 1970).

6) Free choice ("Because I simply chose to do it"). Although freedom of choice is, ontologically, a philosophical issue, many psychologists agree that human behavior is not always deterministic and cannot be exhaustively described by reference to the five above mechanisms. Freedom can be described as "our capacity to pause between the stimulus and response" (May, 1975, p. 100) and make one's own choice, rather than follow current needs, circumstances, or social norms. Capacity for freedom requires courage to confront uncertainty and to take responsibility for one's action (Maddi, 1998), and is based on ability to pause, focus, and integrate one's experience, or mindfulness (Langer, 1989).

The first three mechanisms are biologically based and work in an automatic fashion. Social norms are enforced upon all members of any specific social group, and are not flexible either. Needs, habits, reflexes, and social norms can explain human behavior in a majority of life situations where we act in an automatic fashion and our behavior is predictable. It is relatively rare that we use more flexible, higher mechanisms that allow us to transcend our needs, habits, reflexes, and social norms to act in individually specific ways. For some people, it may be possible to live completely within the logic of biological needs and social norms (a conformist lifestyle – Maddi, 1998), escaping from freedom (Fromm, 1941), because acting in more deterministic, conformist ways is psychologically easier (it allows to reduce responsibility) and less resource-

demanding. Stage theories of moral development in philosophy (Kohlberg, 1973) and ego development in psychology (Loevinger, 1976) describe personality development as the process of advancement from being driven by reactive mechanisms towards social conformity, and further on to autonomous responsibility. Higher developmental stages are associated with higher cognitive complexity and better self-control; however, these stages are not attained by all adult individuals.

Clearly, different interventions may be developed to address different principles of behavior regulation. The reward and punishment approach can be very effective, particularly, in populations with lower levels of ego development and lower capacity for self-control (such as preschool children, psychiatric inpatients, prison inmates), where other interventions may fail. However, empirical findings show that environments controlling people in this way tend to undermine intrinsic motivation (Ryan & Deci, 2000), and people lose incentives to continue the desired activity once external rewards and punishment cease. Conversely, environments that support autonomy by providing people freedom of choice (albeit limited by certain reasonable rules, or structure) promote ego development (Allen, Hauser, Bell, & O'Connor, 1994). Therefore, the reward and punishment approach to behavioral change has to be used only as a last resort. In populations with medium levels of ego development behavioral change can be more effectively achieved by setting social norms or providing examples. In turn, individuals at the higher levels of ego development can be effectively addressed by offering opportunities and valid reasons to adopt new ways of behaviour, without external enforcement. Specific intervention approaches will be described in the next section.

On the basis of these considerations, we would like to put forward following general recommendations for implementation of social policies:

1) The need to acknowledge widespread irrationality. Simply providing new, more beneficial options for conscious choice does not guarantee that these options will be chosen by a majority of the population. Indirect, situational manipulations (such as placing unhealthy food on the far side of the counter) can often be more effective on a large scale.

2) The need to acknowledge individual differences (the diversity of regulatory mechanisms and ego developmental stages) that exist in populations. A range of measures can be applied simultaneously, addressed at different levels of information processing (e.g., combining rational arguments with heuristics) or at different developmental stages.

3) The need to take into account cultural and social differences. Autonomy-supportive policies providing choices will be more effective in democratic societies with higher levels of education, whereas in other societies external incentives may be more useful. People in individualistic cultures can be more effectively addressed by emphasis on individual choice, whereas in collectivistic cultures the importance placed on group identity and social norms can be more efficient pathways to behavior change.

Approaches to changing behavior

This section provides some examples of possible policy measures that can bring about changes in individual and/or group behaviors. These examples are placed in approximate order from least autonomy-supportive to most autonomy-supportive.

- **Legal proscription and prescription**, such as banning the use of automobiles with emissions above a certain threshold. This is a controlling approach, involving a threat of punishment (e.g. a fine). It may undermine intrinsic motivation to act in a desired way if the goal of the intervention is not clear enough to the people it targets. However, controlling approaches may be effective in settings where irrational or automatic actions prevail.
- **Financial incentives, tax cuts or benefits**, such as progressive car tax scale depending on the engine power, state subsidies for solar panel installation, parking fees in cities.
- **Introducing competition**, whereby people or organizations that are most effective in suggesting innovations or in implementing desired changes are rewarded.
- **Creating environments that support desired behaviour by modifying default options or 'nudging' people** (Thaler & Sunstein, 2009) without changing the overall range of opportunities. Examples would include placing healthy foods at eye level in stores or limiting the sale of alcohol to specialized shops only.
- **Cognitive framing by means of anchoring, priming, heuristics.** This is a variety of 'nudging' in the sense that it targets people who act automatically. For example, placing some money in a donation box increases the amount donated, compared to when the box is initially empty (Oppenheimer & Olivola, 2010).
- **Establishing social norms**, like introducing courses that teach desired behavior at school, or creating environments that suggest that desired behavior is the existing norm (e.g., absence of visible litter in the street discourages littering – Schultz et al., 2013).

- **Propaganda**, including warning labels and scary pictures on cigarette packs, public social advertisements that appeal to emotions, facilitating the creation of communities by people who adopt behavior change.
- **Providing positive role models** that exemplify the desired behavior. Examples would include Mahatma Gandhi drinking milk to encourage Indians to follow him or Angelina Jolie publicizing her mastectomy.
- **Public messages** that provide rationale for new behavior, clarify its value and consequences. These messages are particularly effective if they come from a person who has moral authority within a specific community. Even when controlling measures (e.g., legal) are used, providing rationale reduces their detrimental effects on intrinsic motivation for desired behavior in target populations.

These approaches can be used in combination and implemented across institutions of legal systems, mass media, educational or work institutions.

Ethical considerations

Social psychological studies show that the influence of situational factors on human behavior can be very strong, to the extent of inducing actions that people would not wish to perform if they had taken time and effort to make conscious choice. For instance, Stanford Prison experiment demonstrated that perfectly normal individuals placed in a setting with no clear rules and with opportunity to exercise power over their fellows can start acting in ways that are cruel, degrading, and inhuman; the findings of this study were later confirmed by real-life events in the Abu Ghraib prison (Zimbardo, 2007). Whenever someone aims to manipulate situational factors in order to change human behavior, even for a good purpose, an ethical issue inevitably arises, whether this manipulation is ethically permissible. One possible view of the ethical limitations of behavioral change interventions and of steps that can be taken to ensure these limitations are not transgressed is proposed below.

"With our iron hand we will drive humanity to happiness" – this slogan was popular in Russia after the 1917 revolution, and, most famously, it used to hang in the Solovki Camp, one of the cruelest institutions within Gulag. It is probably fair to note that history has shown empirically that the end does not always justify the means. Discussing this phenomenon, a Russian philosopher said that devil often takes its beginning in the wrath of angels fighting the battle for a just and holy cause (Pomerants, 2004). Because behavioral change interventions target people, they can only be enforced with respect for human freedom, in order not to undermine human development. Political ethics can be based on similar principles to those used in medicine or in research with human subjects. Freedom of will is often thought of as an essential characteristic of human beings. However, based on the research findings presented earlier, we can argue

that although freedom is an essential characteristic of humankind, it is only a possibility for every individual. Freedom can be defined as personal autonomy, or ability to act independently, in self-determined ways, rather than automatic ways determined by spontaneous impulses or external stimuli. Freedom only emerges at advanced stages of individual development, as a human being gains increasing mastery over his/her body and mind. In this sense, we are condemned not to freedom itself, as Sartre used to say, but to the possibility of freedom.

This possibility can be either used or refused. We use it by making conscious decisions that take into account the complexity of our inner selves and of the situation we find ourselves in. We refuse freedom by refraining from taking responsibility for making our choices (Fromm, 1941; Frankl, 1988), leaving the course of our lives in the hands of the situation, society, other people, etc. When people refuse their freedom, their behavior can be more easily influenced or manipulated from outside, either with ethical or unethical intentions (for instance, individuals with lower self-control are more susceptible to becoming corrupt in corrupt settings – Ashforth, Gioia, Robinson, Trevino, 2008).

As a result, some politicians may find it easier to manage non-autonomous people and may even be tempted to undermine human autonomy in populations by creating controlled environments and supplanting democratic institutions. This is often done under the pretext that 'excessive' freedom is dangerous, as it makes individuals and society as a whole unpredictable and harder to control. However, the history of the Western world shows that this is not the case: as long as democratic institutions function properly, a society of autonomous individuals is more sustainable in the long term, because it adapts more flexibly to changing circumstances, provides more opportunities for human development, and makes a better use of human potential than a society of total control. Human development is only possible in autonomy-supportive conditions, where clear rules exist that protect fundamental human rights and freedom of every individual.

We propose the following distinction between ethical and unethical behavioral change interventions. *Unethical interventions are those that achieve their ends by means of reducing the possibility for free choice in the individuals that they target.* For instance, a con artist can manipulate unsuspecting victims by persuading them to act immediately and preventing them from taking a pause to reflect on the situation and make a conscious decision. But even if the same approach was used for ethical means (e.g., to trick people into donating to charities), it would still be unethical and it would be detrimental in the long term for both the victims of manipulation (who would experience distress and lose the motivation to donate) and the society at large. Similarly, forced labour as a state

policy is not only unethical, but is also not rational economically, because of extremely low productivity.

In turn, *interventions that have ethical goals and treat humans as free agents, taking care to ensure that the desired behavior is based on conscious and responsible choice, are always ethical.* This point seems clear enough. For instance, organ donation that harms the donor is justified, as long as donation is a free (conscious) and responsible (taking into account the consequences) decision. Similarly, an appeal to citizens to reduce consumption or to donate to a good cause is justified if it has ethical goals and if citizens are free to adopt or to refuse from adopting the new behavior.

Between these two extremes are *interventions that have ethical goals, but do not rely on free agency*. In the course of such interventions, the state may modify the environment to change the behavior of individuals to make it more conducive to well-being, but this modification is enforced, rather than freely adopted. In this case, the society functions as a paternalistic agent that enforces its decision on individuals. We can find many examples of paternalism in democratic countries, for instance, laws that enforce mandatory wearing of seatbelts by car drivers and their passengers by means of heavy fines. Such paternalistic interventions can be deemed *ethical as long as they have ethical goals and target people who refrain from making voluntary decisions* so that people are free to opt out of the default arrangement provided to them by the state (such as pension or health insurance contributions). Varieties of this approach are called 'soft paternalism' (Feinberg, 1986), 'asymmetric paternalism' (Camerer et al., 2003), or 'libertarian paternalism' (Thaler & Sunstein, 2003; Sunstein & Thaler, 2003). However, libertarian paternalism may not be feasible in all situations (for instance, seatbelt laws exemplify 'hard' paternalism, as they do not have an opt-out option, which would render the whole mechanism impractical). Policy interventions that limit the freedom of individuals in this way can still be deemed *ethical, as long as they have ethical goals, are adopted by means of a universal agreement or a democratic procedure, and can be revoked at any time* by means of the same procedure.

These issues of ethical paternalism can only be briefly outlined in a few paragraphs. In general, development and introduction of paternalistic policies requires great care consideration, and public discussion. Because coercion undermines human development, it has to be avoided, whenever possible. Older, coercive reward-and-punishment policy approaches can be replaced with nowadays better-researched 'nudge'-type interventions that foster responsible human autonomy.

References

Allen, J. P., Hauser, S. T., Bell, K. L., & O'Connor, T. G., 1994. Longitudinal assessment of autonomy and relatedness in adolescent-family interactions as predictors of adolescent ego development and self-esteem. *Child Development,* 65(1), 179-194.

Allport, G. W., 1961. *Pattern and growth in personality.* New York: Holt, Rinehart, and Winston.

Ariely, D, 2008. *Predictably irrational.* New York: Harper Collins.

Ashforth, B. E., Gioia, D. A., Robinson, L. L., Treviño, L.K., 2008. Introduction to special topic forum: Re-viewing organizational corruption. *Academy of Management Review*, 33(3), 670-684.

Camerer, C., Issacharoff, S., Loewenstein, G., O'Donoghue, T., Rabin, M., 2003. Regulation for conservatives: Behavioral economics and the case for "Asymmetric Paternalism". *University of Pennsylvania Law Review*, 1151(3), 1211-1254.

Chaiken, S., 1980. Heuristic versus systematic information processing and the use of source versus message cues in persuasion. Journal of *Personality and Social Psychology*, 39(5), 752-766.

Craik, F.I.M., Lockhart, R.S., 1972. Levels of processing: A framework for memory research. *Journal of Verbal Learning and Verbal Behavior*, 11, 671-684.

Darley, J. M., and Batson, C.D., 1973. From Jerusalem to Jericho: A study of situational and dispositional variables in helping behavior. *Journal of Personality and Social Psychology*, 27, 100-108.

Feinberg, J., 1986. *Harm to self*. Oxford: Oxford University Press.

Frankl, V., 1988. *The will to meaning: Foundations and applications of logotherapy*. New York: Meridian.

Fromm, E., 1941. *Escape from freedom*. New York: Farrar & Rinehart.

_____ 1955. *The sane society*. New York: Rinehart & Company.

Gilmore, J.M., & Durkin, K., 2001. A critical review of the validity of Ego Development theory and its measurement. *Journal of Personality Assessment*, 77(3), 541-567.

James, W., 1890. *The principles of psychology*. New York: Henry Holt.

Kahneman, D., 2011. Thinking, fast and slow. London: Macmillan.

Kohlberg, L., 1973. The claim to moral adequacy of a highest stage of moral judgment. *Journal of Philosophy*, 70(18), 630–646.

Langer, E. J., 1989. *Mindfulness*. Cambridge, Massachusetts: Perseus Books.

Leontiev, D., 1999. *Psikhologiya smysla* [The Psychology of Meaning]. Moscow: Smysl.

Levine, R., 2006. *The power of persuasion: How we're bought and sold*. New Jersey: Wiley.

Loevinger, J., 1976. *Ego development.* San Francisco: Jossey-Bass.

Maddi, S. R., 1998. *Creating meaning through making decisions.* In P. T. P. Wong & P. S. Fry (Eds.), The Human Quest for Meaning. Mahwah, New Jersey: Erlbaum, pp. 3-26.

Maslow, A. H., 1993. *The farther reaches of human nature*. London: Penguin.

May, R., 1975. *The courage to create*. New York: W. W. Norton.

Myers, D., 2010. *Social Psychology*. 10th Ed. New York: McGraw-Hill.

Oppenheimer, D.M., Olivola, C.Y., 2010. *The science of giving: Experimental approaches to the study of charity (the society for judgment and decision making series).* New York: Psychology Press.

Pomerants, G.S., 2004. *Sny zemli* [The Dreams of Earth]. Moscow: ROSSPEN.

Pratkanis, A. R., & Aronson, E., 2001. *Age of propaganda: The everyday use and abuse of persuasion* (rev. ed.). New York: W. H. Freeman.

Ryan, R. M., & Deci, E. L., 2000. Self-determination theory and the facilitation of intrinsic motivation, social development, and well-being. *American Psychologist*, 55, 68-78.

Schultz, P. W., Bator, R. J., Large, L. B., Bruni, C. M., & Tabanico, J. L., 2013. Littering in context: Personal and environmental predictors of littering behavior. *Environment and Behavior*, 45, 35-59.

Schwartz, B.,2004. *The paradox of choice*: Why more is less. New York: Harper Perennial.

Skinner, B.F., 1938. *The behavior of organisms*. New York: Appleton-Century-Crofts.

Sunstein, C., Thaler, R., 2003. Libertarian paternalism is not an oxymoron. *University of Chicago Law Review*, 70(4), 1159–1202.

Thaler, R., Sunstein, C., 2003. Libertarian paternalism. *The American Economic Review*, 93, 175–179.

Thaler, R.H., Sunstein, C.R., 2009. *Nudge: Improving decisions about health, wealth and happiness* (2d edition). New York: Penguin Books.

Zimbardo, P.G., 2007. The Lucifer effect: *Understanding how good people turn evil*. New York: Random House.

Chapter 19: Conclusions and Future Directions

— John de Graaf, Ilona Boniwell and Robert Levine

'Tis not too late to seek a newer world…
It may be we shall touch the Happy Isles…

~ Alfred, Lord Tennyson

Report summary

In this report, we have:

- Examined both the strengths and weaknesses of the world's current measure of economic and social progress, the Gross Domestic Product, and found GDP wanting in serious ways.
- Explored in depth the subject of *Gross National Happiness* and looked specifically at the domains of life identified as being essential to well-being and happiness by the nation of Bhutan, based on that nation's own experience and consultation with international wellbeing scholars over a period of many years. (chapter four)
- Structured this document based on Bhutan's domains of happiness. (throughout)
- Made the case for subjective wellbeing in regards to public policies and outlined a series of actually-existing policy options from countries around the world that seem to us most likely to improve well-being in each domain of happiness, addressing the primary objections to making wellbeing and happiness matters of public policy. (chapter three and throughout)
- Shown how happiness provides benefits to society and to other people far exceeding its value to individuals alone. (chapter five)
- Merged theory and practical application. (throughout)
- Highlighted potential difficulties in implementing our recommendations. (throughout)
- Challenged prominent assumptions about market choices as a guide to what makes people happy and to the idea that people make fully informed decisions as consumers. (chapter three).

In so doing, we have looked to advice from leading experts both in Bhutan and around the entire world. We are grateful for their contributions to this volume.

The writers of this report have been asked to freely express the full range of their interpretations of the available information. They alone are responsible for

the content of their chapters and they do not all see these issues in precisely the same way. But of this much they are clear: happiness and wellbeing are indeed proper objectives of public policy and international discourse. Indeed, as we argued in chapter three of this report, "the economy is properly the servant of happiness, not an end in itself."

In this concluding chapter, we will explore in depth the *New Development Paradigm Working Model* developed during our meetings in Bhutan in January and February of 2013. We will argue that the need for a new paradigm is urgent and we will offer some practical ways to begin to measure our success.

What we want

We are citizens of this planet: political leaders; experts in a multiplicity of academic disciplines; activists; authors; and ordinary working people. We look uncomfortably at the world our successors will inherit.

We believe that all human beings are created equal. They are endowed by creation with certain inalienable rights, among them life, liberty and such conditions of wellbeing as might make possible their fullest pursuit of individual and collective happiness.

We further believe that human beings bear responsibility to ensure these rights for all generations yet to be born, and for all other life forms with whom we share this planet.

To secure these rights, social and economic development paradigms, systems and policies are instituted by human beings, deriving their legitimacy from their proven efficacy and from the continued consent of humanity.

We believe our current development paradigm, based on unlimited economic growth and unrestricted market expansion, measuring its success by increases in the Gross Domestic Product, and ushered onto the world stage by the Bretton Woods Agreement of 1944, has outlived such legitimacy and must now be supplemented by a new agreement, a new paradigm and new policies better suited to the new demands of the modern era.

We believe that economies must be purposed to serve the needs of people and of life; people must not be sacrificed to the needs of an economy.

To this end, we have been inspired and encouraged by the small nation of Bhutan, which has called on the entire world to change its values and its measurements of success, and has shown by its own example some of the ways by which this can be accomplished.

In a world facing serious ecological challenges from unlimited economic growth and consumerism, *we are driven with great urgency to our conclusion*, understanding that both the peril and the promise of our era are enormous.

The limits to growth

More than forty years ago, the best-selling book *Limits to Growth* (Meadows, Randers & Meadows, 1972) alerted the world to the unsustainable quality of current patterns of population and economic growth. The scenarios predicted in the book using sophisticated computer modeling have largely been realized. The Global Footprint Network finds our current world economy to be some 50 percent in "overshoot," that is we are already using 40 percent more resources and absorbing 50 percent more wastes than is possible to sustain over time (see: http://www.footprintnetwork.org/en/index.php/GFN/page/world_footprint ∠).

If the rest of the world were to suddenly have the "ecological footprint" of the United States (that is to require the same amount of productive land, air and water to provide for its lifestyle as the US does currently), we would need five planets to replenish the resources and absorb the wastes. We are clearly on a collision course with the natural limits of the biosphere and need to find a way of achieving wellbeing for all at far less cost to the planet. The famous environmentalist David Brower (Brower, 2012) used a powerful metaphor to point out the absurdity of our current course.

He compressed the age of the earth, estimated by scientists at some 4.6 billion years, into seven days, the Biblical week of creation, if you will. When you do this, a day represents about 650 million years, an hour, 27 million, a minute, about 450,000 years, and a second, 7,500.

On Sunday morning, the earth congeals from cosmic gases. In the next few hours, land masses and oceans begin to form, and by Tuesday afternoon, the first tiny "proto-cells," of life emerge, probably from scalding primordial vents in the bottom of the oceans. In the next few days, life forms become larger, more complex and more wondrous.

Before dawn on the last day—Saturday—trilobites and other strangely-shaped creatures swim by the millions in the Cambrian seas. Half a billion years later, in real time, we will be amazed by their fossils, scattered about the globe.

Around the middle of that very last day of the week, those gargantuan beasts, the Great Reptiles, some mild, some menacing, thunder across the land and fill the sky. The dinosaurs enjoy a long run, commanding Earth's stage for more

than four hours, until a monstrous meteorite, landing in the Gulf of Mexico, makes the climate too cold, and ends their reign.

By the late afternoon and evening on Saturday, mammals, furry, warm-blooded and able to withstand a cooler world, flourish and evolve, until, just a few minutes before midnight, on that final night of the week, Homo *sapiens* walks erect on two legs, learns to speak, use fire and create increasingly complex forms of organization.

Only about 10,000 years ago in real time, less than two *seconds* before midnight in our metaphor, humans develop agriculture and start building cities. At a third of a second before midnight, Buddha is born; at a quarter of a second, Christ.

Only a thirtieth of a second before midnight, we launch the Industrial Revolution, and after World War II, perhaps *a hundredth of a second* before midnight in our week of creation—again, on the final night—the age of consumerism begins, the age of stuff.

In that hundredth of a second, Brower and others have pointed out, we have managed to consume more resources than did all human beings all together in all of previous history. We have diminished our soil, fisheries, fossil fuels and who knows what other resources, by half. We have caused the extinction of countless other species, and we have changed the climate.

Think about it; try to grasp in your mind what it means that we have done all of this in this blink of the geological eye.

There are people, Brower went on to say, who believe that what we have been doing for that last one-hundredth of a second can go on indefinitely. If they even consider the issue, they believe, without evidence, that application of new technologies will allow our continued hyper-exploitation of the planet's resources.

They are considered normal, reasonable, intelligent people; indeed, they run our corporations and our governments. But in reality, they are stark, raving mad. It will be hard to change their minds and hard to change our behaviors, but not nearly as hard as it would be to change the laws of physics. We simply can't grow on like this.

Does that mean a world of austerity and privation?

The limits suggested by Brower and others often call forth a sense of "gloom and doom," a sense that sacrifices for the sake of the biosphere will mean lives of poverty and misery for all.

But the *good news* is that the world doesn't have to continue the same patterns of economic growth to attain high levels of human wellbeing and happiness.

The relationship between money and wellbeing is complex, but it does not suggest that future happiness requires endless growth in incomes. The dominant, though frequently challenged, theory for the past several decades has been the "Easterlin Paradox," named for its creator, economist Richard Easterlin. That theory offers two major conclusions:

1. When comparing individuals within a country, wealthier people report greater happiness, but

2. When making international comparisons, however, national income per person is, beyond a level of modest affluence, weakly related to peoples' happiness levels.

There is a significant exception to this second assertion: The lowest income countries—those without enough money for food and shelter--are least happy with their lives. Evidence indicates that this is also true on an individual level. Recent survey data in the United States, for example, has found that people in poverty are more likely than those not in poverty to suffer from a number of chronic health problems and that they are most disproportionately prone to suffer from psychological depression. Thirty-one percent of the poor report having been diagnosed with depression at some point, compared to 15.8 percent of those not in poverty (Gallup, October 30th, 2012).

When GDP rises in low income countries, it is often accompanied by significant gains in happiness. But beyond a modestly comfortable standard of living, however, there is very little relationship between national income and happiness. Countries whose people have enough income to meet their basic needs are barely less happy than those with greater wealth. Easterlin explains the paradox this way:

> In all societies, more money for the individual typically means more individual happiness. However, raising the incomes of all does not increase the happiness of all. The happiness-income relation provides a classic example of the logical fallacy of composition—what is true for the individual is not true for society

> as a whole… Individuals assess their material wellbeing, not in terms of the absolute amount of goods they have, but relative to a social norm of what goods they ought to have.

Easterlin bases these conclusions on a wealth of data (e.g. Easterlin, 1974; Easterlin, et al., 2010). If correct, Easterlin's theory has far-reaching implications for policy decisions. While the eradication of poverty should be a primary goal of government policies aimed at improving happiness, the same is not necessarily true for economic growth per se, which, beyond a modest level of comfort and security, does little to improve wellbeing.

Numerous other studies have also demonstrated the limitations of increased wealth for long-term happiness. For example, Brickman, Coates, and Janoff-Bulman (1978) interviewed 22 winners of major U.S. lotteries. The winners turned out to be no happier in the long run than they were before winning their jackpots. For most winners, there appears to be an initial elation, with typical comments like, "Winning the lottery was one of the best things that ever happened to me." However, this feeling usually fades after a few months and the winner returns to his or her previous level of happiness. These findings suggest that, consistent with Easterlin's Paradox, happiness is relative. The greatest effect of winning the lottery may be to raise our notions of affluence, rather than our long-term happiness.

Moreover, Richard Wilkinson and Kate Pickett have demonstrated that the Easterlin paradox holds in many other areas of life as well as happiness—life expectancy, educational levels, leisure time, and so forth. (Wilkinson and Pickett, 2010)

Uneconomic growth

There has been much recent controversy regarding Easterlin's thesis, with some researchers pointing out that in many cases, happiness levels do continue to grow, albeit slowly, with GDP, even in the richest nations. But while some gains in happiness may continue past the point at which the curve of happiness tends to flatten out, they are often far too modest to justify their costs in decreased equity and sustainability. Economist Jeffrey Sachs (see chapter four) and others (including Easterlin) have made the case that where such gains do continue, they are likely to be greatest in more equal societies with strong social and economic safety nets, such as the Nordic countries. *Nonetheless, such gains are still coupled with potentially unsustainable resource use.*

While the economic paradigm based on limitless growth prevails in nearly all nations, the United States provides the clearest powerful example of the Easterlin paradox. Although U.S. per capita GDP has tripled since the late 1950s

in real dollar terms, levels of happiness remain essentially the same as they were then. In his Italian best-seller, *Manifesto for Happiness*, (Bartolini, 2010) University of Siena economist Stefano Bartolini argues that faster economic growth in the United States, in comparison with that of Europe, actually represents social decay rather than economic dynamism. In this chapter, we often refer to the U.S., because the American model of economic development is commonly held up as *the* paradigm for other nations to emulate. In Bartolini's view, the opposite is true.

Bartolini calls America, "the example *not* to follow," and shows that GDP growth in the U.S. is actually driven by increasing social disconnection and greater loneliness, loss of leisure time, and a deterioration of the American environmental commons. In return for the loss of such non-material need satisfiers as relationships, time and access to nature, the U.S. economy now offers to meet the same needs through the purchase of consumer goods: *Pressed for time? Buy more expensive fast food! Feeling lonely? Buy a new car and win new friends! Feeling out of touch with nature in your strip-malled habitat? Fly to a tropical paradise for a Club Med holiday!* Many of the expenses that drive GDP growth in the U.S. are defensive; they respond to losses in the quality of life and offer less satisfactory alternatives at higher costs. Yet they count as plusses when GDP is determined.

Economist Herman Daly argues that "growth" refers to purely quantitative expansion, while "development" denotes qualitative improvement (Daly, 1996). As Manfred Max-Neef, a contributor to this report, puts it, "Growth is not the same thing as development and development does not necessarily require growth." Indeed, as we have seen, if such growth comes at the expense of equality, sustainability or the ability to meet essential non-material needs, it may actually impede development and wellbeing. It becomes, in Daly's words, "*un*economic growth." Much current growth, comprised of defensive measures against the negative impacts of earlier growth, can be seen in this way.

The domains of happiness

This report was written as part of an initiative launched by the 5th Druk Gyalpo (King) of Bhutan, Jigme Khesar Namgyel Wangchuck, with the goal of assisting the United Nations in outlining a *New Development Paradigm* based on Equitable and Sustainable Wellbeing and Happiness. The impetus for this directive began decades earlier with an observation from the current king's father. While still a very young man, Jigme Singye Wangchuck challenged western consumer values by famously declaring that "Gross National Happiness is more important than Gross National Product." Since then, under the leadership of the Centre for Bhutan Studies, the former kingdom (now with a Parliamentary government) has made enormous strides in creating a sophisticated Gross

National   Happiness   Index,   its   national   measure   of   progress (www.grossnationalhappiness.com).

The index uses survey data to see how well Bhutanese are doing in a range of "domains" deemed essential to human wellbeing and happiness by experts in the field. As outlined in this report, these domains include:

- *material wellbeing*, or "living standards," (the chief component of GDP) but also,
- *health*
- *psychological wellbeing*
- *environment*
- *cultural vitality*
- *community vitality*
- *governance*
- *time balance* and
- *education*

As we mentioned in chapter two, "it is worth noting that these facets emerged from a largely Buddhist worldview, and other societies might favor different dimensions."   Bhutan's complex GNH survey, conducted about once every three years using large random samples, assesses the percentage of Bhutan residents who attain basic sufficiency in each of the domains. Those who reach a certain level of sufficiency as determined to be "happy." In all of this, it is important to strive for *balance* among the domains—great success in one area must not come at the expense of failure in another. (Ura et al, 2012).

The *New Development Paradigm* promoted by Bhutan pays attention to a wide array of human needs (also extending that consideration to other species), and to the nine key domains of wellbeing, not just those so far counted by GDP. As mentioned in chapter one of this report, it is understood that such a system must be *equitable*, without large gaps between rich and poor, and that it must be *sustainable;* that is, the new economy must fit within Earth's planetary boundaries; indeed, the global economy is a wholly-owned subsidiary of the earth itself.

In the past few years, Bhutan has been taking its ideas to the rest of the world, promoting the concept of *Equitable and Sustainable Wellbeing and Happiness* in the United Nations, for example. In April, 2012, its then-Prime Minister Jigmi Thinley spoke to a gathering of 800 people at the UN in no uncertain terms:

The time has come for global action to build a new world economic system that is no longer based on the illusion that limitless growth is possible on our precious and finite planet or that endless material gain promotes wellbeing. Instead, it will be a system that promotes harmony and respect for nature and for each other; that respects our ancient wisdom traditions and protects our most vulnerable people as our own family, and that gives us time to live and enjoy our lives and to appreciate rather than destroy our world. It will be an economic system, in short, that is fully sustainable and that is rooted in true, abiding wellbeing and happiness.

New development paradigm working model

The authors of this report have been part of an International Expert Working Group (IEWG) advising Bhutan as it promotes its *New Development Paradigm*. (see www.newdevelopmentparadigm.bt). While in Bhutan, they sometimes disagreed over the relative importance of policy versus personal change, or the relative usefulness of the terms *happiness* and *wellbeing*, as well as other points. Enrico Giovannini, now Italy's Minister of Labor and Social Issues, created a positive synthesis from the disagreements among members of the IEWG. He first drew the diagram below with a stick in the sand, as a model of the paradigm. The Secretariat for the IEWG now refers to Giovannini's diagram as the *New Development Paradigm Working Model* and we will continue to refer to it as such.

The model starts with human needs, such as those described by Abraham Maslow and by a member of Bhutan's UN advisory group, famed Chilean economist Manfred Max-Neef.
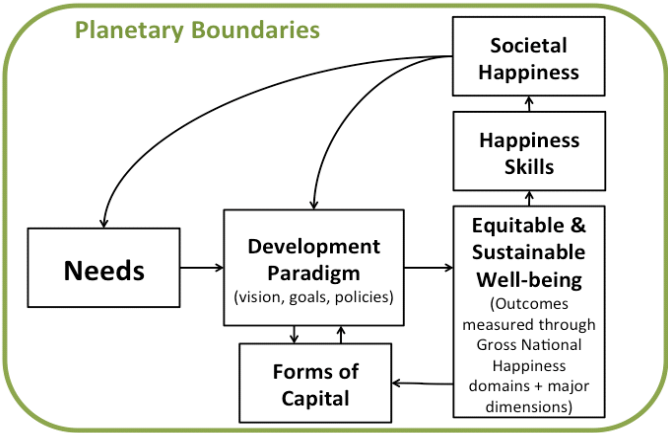
Maslow's theory, first proposed in 1943, was the result of his belief that psychology was focused on the wrong subject matter. Instead of emphasizing the cure of neuroses and psychoses, he argued that psychologists should be trying to understand what creates psychologically healthy individuals. Maslow suggested that by more effectively meeting real human needs, we could reduce mental illnesses and increase psychological wellbeing (Maslow & Lowery, 1998). His theories were among the first forays into the field now known as positive psychology. Maslow argued that human needs manifest themselves in a hierarchy of "pre-potency,' beginning with the most basic survival needs. His "hierarchy of needs" looked as follows.
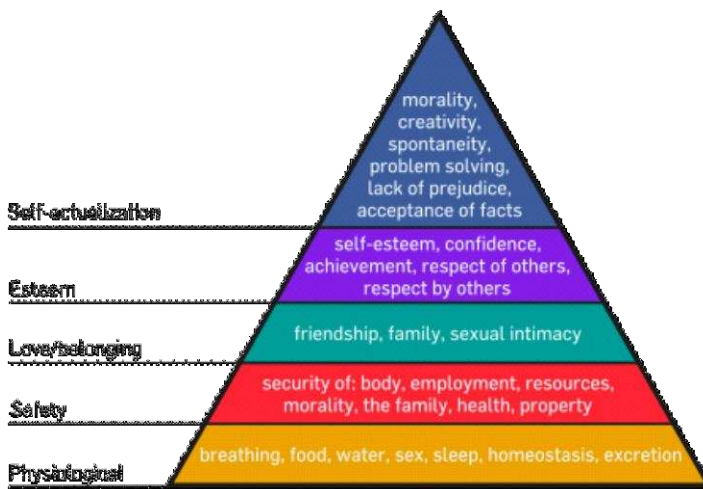
Maslow believed that lower-level needs, if deeply unmet, would strongly assert their demands into individual consciousness and thwart the satisfaction of higher needs until the more basic needs were met to at least a modest degree. The most basic of these needs require substantial material production—food, shelter, clothing, etc. But Maslow's model is not predicated on endless material growth; indeed, the higher level or "meta" needs are essentially non-material and require time, social connection and education more than consumer goods.

Max Neef's theory of human needs

Chilean economist Manfred Max-Neef has expanded Maslow's needs theory, though the two models overlap in many ways. In Max-Neef's system as in Maslow's, beyond certain physical requirements, most needs are non-material in nature and need not necessarily be satisfied by economic growth or measured through GDP.

Need	Being (qualities)	Having (things)	Doing (actions)	Interacting (settings)
Subsistence	physical and mental health	food, shelter, work	feed, clothe, rest, work	living environment, social setting
Protection	care, adaptability, autonomy	social security, health systems, work	co-operate, plan, take care of, help	social environment, dwelling
Affection	respect, sense of humour, generosity, sensuality	friendships, family, relationships with nature	share, take care of, make love, express emotions	privacy, intimate spaces of togetherness
understanding	critical capacity, curiosity, intuition	literature, teachers, policies, educational	analyse, study, meditate, investigate,	schools, families, universities, communities,
Participation	receptiveness, dedication, sense of humour	responsibilities, duties, work, rights	cooperate, dissent, express opinions	associations, parties, churches, neighbourhoods
Idleness	imagination, tranquility, spontaneity	games, parties, peace of mind	day-dream, remember, relax, have fun	landscapes, intimate spaces, places to be alone
Creation	imagination, boldness, inventiveness, curiosity	abilities, skills, work, techniques	invent, build, design, work, compose, interpret	spaces for expression, workshops, audiences
Identity	sense of belonging, self-esteem, consistency	language, religions, work, customs, values, norms	get to know oneself, grow, commit oneself	places one belongs to, everyday settings
Freedom	autonomy, passion, self-esteem, open-mindedness	equal rights	dissent, choose, run risks, develop awareness	Anywhere

Both theories have important value. Max-Neef's is a more full exposition of needs, but Maslow's recognition that needs tend to assert themselves in a rough hierarchy of awareness in the individual (he did not believe that lower level needs had to be fully satiated for higher needs to assert themselves) is helpful in our understanding of the impacts of GDP. Where incomes are lower and *basic physiological* needs remain unmet, GDP increases have a greater impact on happiness than at higher levels, where the *satisfiers* of needs, as Max-Neef refers to them, are less material in nature.

In the 1960s, Maslow suggested that in rich countries like the U.S., physiological and safety needs had been met for most of the population and that these societies needed to focus their attention on satisfying belongingness and esteem

needs. But it could well be argued that, in the era of cutbacks in social safety nets and greater inequality that began about 1980, needs for safety and security have reasserted themselves. People actually feel less secure today in many wealthy countries; we have actually gone backwards or tumbled down on Maslow's pyramid.

Resources

In our model, the *development paradigm* is the economic system, modified in each society by market rules, policies, institutions and cultural expectations that employ *resources* to meet needs. These resources may be described in many ways, each of which has particular usefulness for explaining different concepts. For example, we often speak of resources as natural gifts—minerals, soil, etc.— that can be shaped into useful products. But in our companies, we also refer to *human resources* and we have our HR departments.

More recently, the new discipline of ecological economics has begun to speak of various forms of capital. Capital, until recently, referred to the factories, physical infrastructure and financial resources that businesses used to provide employment and consumer goods, but its meaning has been expanded to include *Natural Capital* (the gifts of nature, which provide both *resources for production* and *ecosystem services*), *Human Capital* (the health, competence and productivity of workers and other members of society), and *Social Capital* (the value of social connection and non-market institutions such as government and the non-profit sector).

Economist Robert Costanza and others have begun to estimate the dollar value of natural resources and ecosystem services, while social scientists such as Robert Putnam have shown how social capital has declined as human beings have become more disconnected from each other in industrial society.

The use of the term "capitals," when speaking of humans or nature is controversial. Some members of the IEWG, including Vandana Shiva and David Korten, feel that such usage devalues life by monetizing its worth, and thereby reinforces old paradigm thinking. But use of the term *capital* has undeniable value when explaining the importance of nature and human welfare to business people, who understand that one must not waste one's capital, but instead steward it and invest in it. Use of the term *assets*, another way to describe natural and human resources, offers similar positive and negative values in communicating our ideas. Economist Amartya Sen uses the term *capabilities* to describe the strengths achieved by developing human and social capital. The word *capacities* conveys similar meaning. But what is effective in reaching business people or policy makers may feel uncomfortable to traditional

environmentalists or indigenous peoples, and so forth. There may be no best term here.

It seems that the best choice of terms is context-dependent and that a mix of descriptors is most suitable. In our view, choosing to eliminate any descriptor such as capital, which may help explain new development paradigm concepts to particular audiences, represents an unnecessary sacrifice of strategic assets.

Elements of the development paradigm

In each society and for the global economy, the development paradigm shapes the way economy and culture employ resources to meet human needs. Elements of the paradigm include:

- *The economic system*—the particular mix of private, co-operative and public production of goods and services, including the rules governing the market, the rates and priorities of taxation, rules governing the financial system, the degree of wealth redistribution, stakeholder participation in economic institutions, social safety nets, etc.

- *Government*—including the degree of democracy and representation of the public in decision-making, the role of money in politics, corruption, trust in political leaders, the transparency of political decisions, the role of political parties and lobbying groups, the degree of free speech, right to protest, opportunities for direct deliberation, etc.

- *Civil society*, including the non-profit and NGO sectors, local and neighborhood organizations.

- *Cultural factors and institutions*—including the role of social mores, popular morality, faith communities, degree of social tolerance, the media and the arts.

- *Education*—including formal public and private schooling and lifelong learning opportunities.

- *The police, prison and legal system*, including degrees of corruption and transparency.

In each of these areas, we may look to specific models for *best practice examples* which enhance wellbeing and happiness, and we have done that throughout this report. Policies which effectively enhance wellbeing are generally those which:

- Reduce unemployment, which is generally toxic to happiness.

- Promote economic security and minimize social instability; loss aversion is a prominent human trait—people are generally rendered unhappier by loss of jobs, income, health and so forth than they are rendered happier by economic gains.

- Protect human rights and social tolerance, particularly for vulnerable populations (e.g. women, racial or sexual minorities and children)

- Increase interpersonal trust and trust in institutions

- Increase personal freedom and citizen empowerment

- Increase autonomy and meaning in the workplace

- Improve social connection

- Reduce corruption

The impact of inequality

While earlier studies by Ruut Veenhoven and others found little connection between inequality and happiness, more recent research powerfully confirms the observation of Richard Wilkinson and Kate Pickett in *The Spirit Level* that greater inequality leads to declines in happiness as well as poor performance in many other areas of quality of life (Wilkinson and Pickett, 2009). Indeed, growing inequality may be the key reason for the flattening and even decline in U.S. happiness scores in recent years, despite major increases in GDP. Moreover, inequality features prominently in health and violence outcomes among countries, with the highly-stratified U.S. showing the poorest health performances and highest levels of violence among rich countries, while more egalitarian Japan and Sweden do far better.

Researchers Edward Diener and Shigehiro Oishi have found that the key reason why growing inequality contributes to reduced happiness levels is that it weakens social and personal trust (e.g., Oishi, Kesebir, & Diener, 2011). Clearly, the new development paradigm must put a premium on reducing large differences between rich and poor.

Are happiness and wellbeing synonymous?

In the *New Development Paradigm Working Model*, the terms *Happiness* and *Wellbeing*, commonly spoken of as just two ways to say the same thing, are *not* synonymous. Often, modern advocates of life satisfaction quarrel about this,

with academics sometimes cringing over what they believe is the amorphousness of the word "happiness," while ordinary people often find the term "wellbeing" overly academic. As we have stated in chapter two, "the contributors to this report believe, with the approach of GNH, that the best life, the one most worth pursuing, includes both subjective and objective elements. Wellbeing is plural, and not monistic: there is no one final-common-path."

But in our new development paradigm working model, Equitable and Sustainable *Wellbeing* is what can be measured through (generally) *objective* data—such things as Income Levels, Life Expectancy, Literacy, Pollution, Voter Participation, Leisure Hours, Rates of Depression, Unemployment, Poverty, etc. We say "generally" objective, because often even this data is a result of surveys which do rely in part on the assessments of the surveyed.

In each domain, there are *minimum levels of sufficiency* that are needed to be able to say that basic wellbeing has been achieved in a society for that domain. Improving these objective conditions of life is the primary goal of *public policy*. And in this case, many of the policy examples referred to in the chapters of this report can, we believe, contribute to higher levels of wellbeing.

Many policy ideas and change may be effective in improving several domains of life. For example, in chapter three we explain that if "a municipality that decides to shift residential development from low-density suburban sprawl to a higher-density model…"

> These features…contribute to sustainability by reducing the demands for transportation, and the higher density housing requires less infrastructure. They also contribute to community by bringing people closer to a higher number of neighbors, making it more appealing to get out and meet and interact with them. This in turn may induce residents to consume fewer resources, for a variety of reasons: if socializing is easier and more appealing, people may find shopping to be a less attractive leisure activity; they might need fewer consumer products to entertain them; electricity and fuel consumption may decline somewhat; people may share many products rather than buy duplicates of what their neighbors own.
>
> If trust in neighbors is high, then children may have more opportunities for unsupervised play that does not require expensive equipment, driving etc. Additionally, this sort of community will likely be more resilient in the face of economic shocks, as people are better positioned to help each other in times of scarcity. Similarly, because residents drive less, they will be less vulnerable to fluctuations in the price of oil. Besides

the benefits of community and economic resilience, happiness might also be promoted by greater interaction with nature and higher levels of exercise. Were we to add to this list of features a shorter work week and more vacation time, the benefits would likely be multiplied, as people have greater leisure to take the time to interact with each other, again building both community and happiness…

Happiness skills

But people may have sufficient conditions for a good life without being happy. Rich people are certainly not all happy, even if, generally speaking, higher-income persons report greater happiness than lower-income persons. Happiness in this model is the *subjective* sense of people's wellbeing, determined by survey questions—How do you *feel* about your health, your mental state, your access to nature, your finances, your time balance, your purpose in life, etc? People are also asked to evaluate their overall life satisfaction, using several 1-10 scales. This happiness, more about long-term life satisfaction than hedonism, is akin to what Aristotle and the Greeks meant by the term *eudaimonia*.

As this report states in chapter two, "focus on 'eudaimonic' perspectives of contemporary psychology, in this report…is meant to be broad, signifying *everything that makes a person's life goes well*… Equivalent terms for the happiness of organisms generally, then, are 'wellbeing', a 'high quality of life' and perhaps a 'flourishing existence'. One way to understand SWB as a combination of affective and cognitive aspects is to construe it as an *experience*. Subjective wellbeing can be seen as a positive psychological experience of one's state of existence and development that is not a mere emotional flash, but is instead a stable, hedonic mood arising from conscious or unconscious judgment."

Moderating between *objective* Wellbeing and *subjective* Happiness are what our model calls *Happiness Skills*. These are the tools of *personal* change. For example, in chapter two, we pointed out that "it has been found that those who set aside ten minutes before they sleep to recall what went well for them and why feel better and are less depressed than those who do not (Seligman et al., 2005)." Such mindfulness is a happiness skill.

While conditions of life matter greatly for personal happiness, our great religions and wisdom traditions, as well as modern positive psychology and neuroscience, teach us that proper attitudes and behaviors are also essential and, in more comfortable nations, even more important—as we have seen earlier in this report, individuals with a "materialistic" outlook on life are often unhappy, even when they are very comfortable materially. In chapter four, we report that:

> Every day we are bombarded with thousands of messages telling us how important income and material possessions are for our own happiness and wellbeing (Kasser and Kanner, 2004). However, researchers has consistently found that the higher the materialism – a strong relative importance attached to material rewards – the higher the individual's mental problems and the lower people's life satisfaction, vitality and positive emotions (Dittmar et al., 2012; Kasser and Ryan, 1993; 1996).

For another example, changes in public policy such as greater vacation time, shorter working hours and so forth may offer more leisure time to citizens and lead to greater *objective* time balance, but whether or not this leads to improvements in happiness depends in large part on what people do with the extra time these policies make possible. If, for instance, they spend that time in front of the television, their happiness levels are not likely to increase and may even fall. On the other hand, if they use their increase in free time for greater social connection, or for community participation such as volunteering, they are more likely to become happier. Where happiness skills are high, we are likely to see a greater correlation between objective wellbeing and subjective happiness.

The attitudes and behaviors that constitute "happiness skills" (and may also be thought of as "character virtues") include such things as gratitude, altruism (it is indeed, better for happiness, "to give than to receive"), kindness, sociability, delayed-gratification, empathy, compassion, cooperation, and many other behaviors which education can play a part in cultivating.

The teaching of happiness skills is central to education for Gross National Happiness. Different happiness skills are useful in improving one's degree of subjective wellbeing in each of the key domains of life identified by Bhutan. Examples of such happiness skills include, but are in no way limited to:

Domain	Happiness Skills
Environment	Nature appreciation
	Personal environmental behaviors
	Inter-species empathy
	Patience
Living Standards	Frugality
	Altruism/generosity
	Compassion
	Empathy

	Gratitude
	Delayed gratification
Health	Dietary choices
	Exercise
	Sociability
	Mindfulness
	Discipline
	Resilience
	Gratitude
	Forgiveness
	Optimism
	Affection
Time Use	Mindfulness
	Discipline/saying no
	Focus/concentration
	Patience
	Balance
Psychological Wellbeing	Purpose
	Gratitude
	Competence
	Balance
	Self-confidence
	Courage
	Mindfulness
	Delayed gratification
	Optimism

As with policies, the same happiness skills may be useful for increasing subjective wellbeing in several domains. An educational program that systematically teaches happiness skills can help assure that good conditions of life, measured in objective terms, are fully correlated to higher levels of subjective happiness.

Happiness equals genetics plus conditions plus behaviors and attitudes

What is the relative importance of policy and personal behavior to overall subjective wellbeing? This question has been explored at length and a fair amount of disagreement exists among experts. One rule of thumb, suggested by psychologist Sonja Lyubomirsky, has attained commonplace use in the happiness field and has been widely disseminated through the popular film, *Happy* and economist Richard Layard's text, *Happiness: Lessons from a New*

Science. Lyubomirsky (2013) argues that about half of all happiness is genetically-based—some people are just cheerier than others. She claims that only 10 percent of happiness is based on external factors—the conditions of life—while about 40 percent is the result of attitudes and behaviors, or what we refer to here as happiness skills. She believes that increasing happiness depends mostly on changing personal attitudes and behaviors.

Other scholars have called Lyubormirsky's formula into question, arguing that it was based on too small a sample of people with relatively similar lifestyles. Even studies showing differences in happiness due to genetics tend, in their view, to overrate its impact. Showing that sets of twin separated at birth have similar happiness levels is useful, for example, but often the conditions of life of the separated twins are not that dissimilar.

A bigger problem is that of explaining enormous international differences in happiness almost solely though genetic or behavioral factors. How is it possible that first-place Denmark scores 7.7 on international happiness surveys while last-place Togo comes in at 2.9, given only a 10 percent impact from conditions of life factors? Such a gap cannot be possible unless Danes are enormously more genetically disposed to cheerfulness or enormously more skilled in happiness behaviors, neither of which is remotely likely.

It would appear that the gap between Denmark's happiness scores and those of Togo can be largely explained by the huge difference in life conditions and objective wellbeing between the two nations. In short, Lyubomirsky's formula appears to fit poorly with what international happiness data tells us. On the other hand, the differences in happiness evaluations between individuals in these countries whose conditions of life are not dissimilar are likely more due to differences in genetic disposition and relative happiness skills, as Lyubormirsky suggests.

All of this is a caution not to be formulaic about the sources of happiness—50, 40, 10, etc.—but to understand that conditions of life matter more in poorer nations or in nations where inequality is great, while happiness skills may be more important in wealthier and/or more equal countries. Genetic makeup does not easily lend itself to intervention, either of policy or personal behavior.

The beauty of the *New Development Paradigm Working Model* in our view is that it ignores neither the importance of *policy* nor of *personal behaviors* in achieving good lives for all. It does not force us to choose between *happiness* and *wellbeing*, but recognizes that they are different ways of measuring our success. And it excuses neither widespread inequality nor a cavalier attitude toward the ecological limits of our biosphere. But it is not a call for sacrifice; indeed, the research behind the model implies that that we can have a *better* life with less

consumption in wealthy countries, while allowing economic growth where it really adds to wellbeing and at the same time, protecting our planet. The sacrifice is now; "getting and spending," as Wordsworth put it, "we lay waste our powers." In the pursuit of limitless growth, we decimate our only planet for which there is no spare.

Measuring wellbeing: Community and national check ups

You get what you measure. We will not be able to tell whether New Development Paradigm approaches or the policy ideas outlined in this report are having the desired effect on wellbeing and happiness without comprehensive new ways of measuring progress. Politicians point to a swelling GDP as proof that their economic policies are working, and investors reassure themselves that with the overall expansion of the economy, their stocks will also expand. Yet even the chief architect of the GDP (then GNP), Simon Kuznets, believed that "The welfare of a nation can scarcely be inferred from a measurement of national income."

Here's why: although the overall numbers continue to rise, many key variables have grown worse. As we have already mentioned, the gap between the rich and everyone else is expanding. The economic and environmental costs of our addiction to fossil fuels continue to mount. When a city cuts down shade trees to widen a street and homeowners have to buy air conditioning, the GDP goes up. It also goes up when families pay for daycare and divorce, when new prisons are built, and when doctors prescribe antidepressants. In fact, careful analysis reveals much of the economy as tracked by GDP is based on crime, waste, and environmental destruction!

The understanding of GDP's limitations is a long one, yet few alternative ways of measuring progress have been tried as potential substitutes. The United Nations does incorporate an assessment model called the *Human Development Index*, which couples per capita GDP with life expectancy and literacy rates to measure national wellbeing. But many critics feel that HDI still pays far too much attention to GDP.

In the United States and Canada, a more recent measurement, called the *Genuine Progress Indicator*, or GPI, emerged in 1995 and is gaining adherents. While in the US at least, the GPI still ends up with a single number to measure success (as GDP does), the number is derived from a far-more holistic set of indicators. In contrast to GDP—which lumps all monetary transactions together as a *positive* number—the Genuine Progress Indicator *evaluates* the expenses, adding in "invisible" assets such as housework, parenting, and volunteer work, but subtracting "bads," including the following from the GDP:

- Cost of Crime
- Cost of Family Breakdown
- Loss of Leisure Time
- Cost of Underemployment
- Cost of Commuting
- Cost of Household Pollution Abatement
- Cost of Automobile Accidents
- Cost of Water Pollution
- Cost of Air Pollution
- Cost of Noise Pollution
- Depletion of Nonrenewable Resources
- Cost of Long-term Environmental Damage
- Cost of Ozone Depletion
- Loss of Old-Growth Forests

Using this metric as our measure of national progress, we find that although GDP has increased dramatically since the mid-1970s, GPI in the United States has remained flat or even fallen. A recent effort to measure *global* GPI, led by IEWG members Ida Kubiszewski and Robert Costanza found that for the world as a whole, GPI has remained flat since 1978 (Kubiszewski, etal., 2013).

GPI started out as an idea in a think tank, but it is gaining steam among policy makers, in the U.S. at least. The American states of Maryland and Vermont (in the case of Vermont, a leader of the GPI measurement effort is Eric Zencey, author of one of the chapters of this report) now officially measure their GPI, while Oregon and Utah have plans in the works. Leaders from some 20 states met recently at a conference called "Beyond GDP" to talk about how each could apply the idea. Oregon's dynamic First Lady Cylvia Hayes (Hayes, 2013), set the tone:

> We tend to manage what we measure. The primary problem with using the GDP metric is that we are managing for constant economic growth, without measuring the true costs of that growth. In 1962 Simon Kuznets, the man who created the GDP, warned, "Distinctions must be kept in mind between quantity and quality of growth, between costs and returns, and between the short and long run. Goals for more growth should specify more growth of what and for what." One example of Beyond GDP metrics is the Genuine Progress Indicator. The goal of the Genuine Progress Indicator is to measure the actual societal wellbeing and health generated by economic activity. The Genuine Progress Indicator uses 26 metrics and consolidates critical economic,

> environmental and social factors into a single framework in order
> to give a more accurate picture of the progress - and the setbacks -
> resulting from our economic activities.

Maryland's governor Martin O'Malley argued that it is not growth, but the kind of growth, that matters (Hayes, 2013):

> In many ways, we Marylanders, think of ourselves as pro-growth
> Americans - but before you get "wiggy" about that term, let me
> explain: Like you, we believe in growing jobs and growing
> opportunity. Like you, we believe in children growing healthy,
> growing educated, and growing strong. We believe in
> grandparents growing old with dignity and with love. We believe
> in growing trees, growing sustainable Bay fisheries, growing food
> locally to feed our citizens. But not all growth is good.

GPI is a step in the right direction, though as Ronald Colman, who first developed a GPI metrics for Atlantic Canada, has observed, most GPI models currently in use still start by consideration consumption of goods and services as an unquestioned positive, then add and subtract assets and costs from that. Colman's own metrics begin instead with economic security, economic fairness and access to work. In his view, this is a better approach. We agree. Nonetheless, in many cases the GPI train, with GDP as its engine, has already left the station and cannot easily be re-directed. Yet even with its flaws, it provides a far better approach to measuring wellbeing than does GDP alone.

The Genuine Progress Indicator is really common sense with an analytical, pragmatic edge. Internationally, many such excellent indexes are being developed in such places as the UK, France and Australia; one of the best is the *Canadian Index of Wellbeing*, which uses a set of domains closely aligned to that of Bhutan. National vitality, like personal health and community health, is about real things like the health of people, places, natural capital, and future generations. At all levels of our societies, it's time to schedule holistic annual check-ups. We describe other useful indexes such as the OECD's *Better Life Initiative* in chapter two of this report.

Guiding policy decisions

But indexes of well-being will only be truly useful when they lead to actual policy change. In this, GPI data and other information can be most effective in driving policy when combined with policy tools that assess the likely impact of new policy initiatives on wellbeing. Here, another idea from Bhutan is may prove widely useful.

Major policy initiatives in Bhutan are assessed by a 24-member *Gross National Happiness Commission*, which recommends their passage or rejection by parliament based on an analysis of the impact of such legislation on overall happiness. A total of 23 items, representing key indicators among the domains, are assessed, and the commissioners discuss each of them using a "policy tool" or "lens," scoring each indicator on a scale of 1-4, as shown in Diagram 1 below:

Diagram 1 – Material wellbeing or "Living standards"

Economic security			
Will likely result in a net decrease in economic security for population impacted	Unknown Effect on economic security of population impacted	Will likely have little or no effect on economic security of population impacted	Will likely result in a net increase in economic security for population impacted
1	2	3	4

Economic fairness			
Will likely favor higher income earners more than lower income earners of population impacted	Unknown Effect on income earning levels among population impacted	Will likely have little or no effect on different income earning levels among population impacted	Will likely favor lower income earners more than higher income earners among population impacted
1	2	3	4

After discussion, each commissioner must score the proposal for each of the 23 indicators, using his or her best judgment and the 1-4 scale noted above. To ensure continued holistic development that enhances wellbeing and happiness, any policy proposal that improves wellbeing in one domain such as living standards *should not decrease wellbeing in another*, such that a minimum average of 3 points per question or a total score of 69 must be assessed to allow the GNH commission to recommend the policy proposal for passage.

In employing this kind of assessment process, Bhutan stands alone in the world. But we believe that policy tools like this, modified where needed to fit local circumstances, can be useful for assessing the potential outcome of policy options in countries and communities throughout the world.

Measuring happiness

As we see, objective or factually-based indexes such as GPI can help us measure wellbeing more effectively and, when combined with good policy tools, can help drive effective changes in conditions of life. But for policy makers, such objective metrics are not enough. They must know not only if lives are

improving objectively, *but whether or not people understand and appreciate the changes.*

If for instance, crime is falling, but people, fed a steady diet of TV crime shows, believe life is getting more dangerous, politicians may find themselves having achieved important successes but being cast out of office for their efforts. One of the solutions to this is to begin to measure subjective wellbeing or happiness directly. Several nations, including the United Kingdom, are beginning to do this. On the global level, samplings such as the World Values Survey have begun to provide substantial data for comparison between different countries.

The most extensive and oldest of these samplings is the Gallup World Poll, which assesses the happiness of 1,000 people in about 150 countries around the world each year, using the so-called *Cantril Ladder*, which asks people to place themselves on a ladder with rungs from 1-10, assessing where they think they stand between the best of all possible lives for them and the worst. Gallup also uses a 1-10 scale to ask questions about how happy people feel they are and how satisfied with their lives as a whole.

The *United Nations Happiness Report* presents overall "happiness" scores for most of the world's countries, using the above-mentioned Gallup data. For the years 2010-2012, Denmark, at 7.7, heads the list, while Togo, at 2.9 is at the bottom. The United States ranks 17th at 7.0 but has dropped from 11th (7.3) in 2007. Though most but not all (Costa Rica, for example, scores 7.3), of the world's happiest countries are quite wealthy, happiness levels in the richest are generally flat, while many poor nations have seen great improvement in recent years (Angola's score rose from 4.2 to 5.6 between 2007 and 2012, for example), again illustrating that GDP growth is far more important for the poor than for the rich. Social insecurity has led to major drops—averaging 0.7 on a10 point scale—in Greece, Spain and Italy, with an even greater decrease of 1.2 in strife-torn Egypt). (Helliwell, 2013)

The *distribution* of happiness within the population is as important as the overall average level, if not more so. John Helliwell, a lead author of the UN Happiness Report (Helliwell, etal., 2012), observes that:

> Among those countries with high average scores, some have quite high degrees in the distribution of happiness (eg. Denmark and The Netherlands), while in some other fairly high-ranking countries (eg. Costa Rica and the United States) there is much dispersion, and a higher portion of the population has low life satisfaction.

The Gallup World Poll provides substantial useful data for national level assessments of subjective wellbeing. But the poll is too broad in scope to be useful at the local or community level, where sampling sizes are tiny. Moreover, the Gallup Poll does not necessarily engage citizens in a conversation about happiness since they cannot take the poll themselves, and even if they are asked to be part of Gallup's sample, they cannot see their results. Here, it is valuable to have comprehensive, opt-in online surveys that allow everyone to participate and see how well they and their communities are doing.

There are many accessible and effective surveys of happiness. One of them, designed using Bhutan's GNH model and specially developed as a guide to policy- makers, is the joint creation of a Seattle-based NGO called *The Happiness Initiative* (HI) and psychologist Ryan Howell at San Francisco State University. When an individual takes that survey (www.happycounts.org) online (it takes about 15 minutes), they receive an immediate life satisfaction score and scores for each of the ten domains the survey measures (it includes the nine Bhutan domains, and adds a tenth, *work satisfaction*, whose importance for happiness has been made clear by the Gallup organization). Howell and his colleagues present considerable evidence of the validity of the measure through a team of his graduate students did extensive testing of hundreds of survey questions from around the world to find the ones with the highest correlations to reported subjective wellbeing (happiness) for the HI survey.

While the survey can be used to assess personal happiness and life balance, it is more designed for collectivities of people ranging from cities to colleges to businesses, allowing them to determine their aggregate levels of happiness. The process starts when a community pulls together a team of organizations that represent the various domains of happiness, first identified by the work in Bhutan. The team might include, for example:

- *Material wellbeing*—business groups, Chamber of Commerce, labor organizations, poverty NGOs, etc.
- *Health*—public health department, hospitals, schools of public health, alternative health providers
- *psychological wellbeing*—mental health agencies
- *environment*—environmental NGOs and public agencies
- *cultural vitality*—arts institutions and associations, minority organizations
- *community vitality*—Rotary and other local clubs, volunteer groups, media
- *governance*—city councils, other government bodies, political parties
- *time balance*—women's organizations, labor unions
- *education*—schools, universities, libraries

The team members encourage all of their constituents to take the survey over a particular time period, then join together to analyze the results in World Café-style community meetings and recommend policy ideas or neighborhood initiatives to improve happiness and wellbeing.

The Happiness Initiative model, *regardless of the specific survey questions used*, can engage individuals and communities in a powerful conversation about happiness and wellbeing. Nonetheless, policy makers will also want to see more random samples to be sure that the answers and data they are receiving are reliable. One way to do this is to add a battery of subjective survey questions to measures like GPI, an idea which the state of Vermont calls "GPI Plus" (Anielski & Rowe, 1998). Ryan Howell is currently working to reduce the number of questions in the Happiness Initiative survey using those with the highest established correlation to wellbeing to create a poll that can be easily employed by states or localities as part of a GPI Plus model.

Measuring happiness and wellbeing will require us to draw from a plethora of good ideas and models out there in addition to GPI, and cull the best indicators from all of them.

Bhutan woods?

Ecological economists Robert Costanza and Ida Kubiszewski, both members of the IEWG advising Bhutan's government, believe the time has come to "embark on a new round of consensus-building" to develop new economic goals and better measures of success that can replace the famous Bretton Woods Agreement of 1944, which ushered in the age unlimited growth without limit. They propose calling it 'Bhutan Woods,' suggesting that the nation that has championed the idea of a new development paradigm in the United Nations is the perfect place to hammer out the new plan. They have helped build a useful new Web site and organization, the Alliance for Sustainability and Prosperity (www.asap4all.org) to promote the concept.

Using the diagram for taking the next step

The New Development Paradigm Working Model, first outlined by Enrico Giovannini, can also be a starting point to engage communities and policy leaders in an effective discussion of "next steps" on the road to GNH. The model is simple, but facilitators can employ World Café-style gatherings of a wide diversity of citizens to populate the boxes in the working model diagram with detailed information, crowd-sourced from the participants using post-it notes—what are the elements of the paradigm, what are human needs, what are the resources to meet them, what do we want to measure objectively and subjectively, etc. Such processes can help take the New Paradigm ideas

presented in this report and use them "on-the-ground" to improve wellbeing and happiness.

A caveat: aggregate measures of subjective life satisfaction and contentment with conditions of life are important for societies, and together with objective data, can tell us how we are doing in meeting perceived human need. But former Prime Minister Thinley makes clear that what his country means by "happiness" is not merely a measurement of personal satisfaction, and certainly "not the fleeting, pleasurable 'feel good' moods so often associated with that term. We know that true abiding happiness cannot exist while others suffer and comes only from serving others" (Pereira, 2013).

But there may be no conflict here. One of the most important findings to come out of recent happiness research is that people get greater and more sustained pleasure when they do something for others than when they do things for themselves (e.g., Aknin, etal., 2012). Working to enhance the happiness of others not only benefits those one is serving. It also enhances the quality of one's own life.

References

Aknin, L., Dunn, E., & Norton, M., 2012. Happiness runs in a circular motion: Evidence for a positive feedback loop between prosocial spending and happiness. *Journal of Happiness Studies,* 13, 347-355.

Anielski, M., & Rowe, J., 1998. *The 1998 U.S. Genuine Progress Indicator (GPI).* San Francisco/Washington, D.C.: Redefining Progress.

Bartolini, S., 2010. *Manifesto per la Felicità.* Rome: Donzelli Editore.

Brickman, P., Coates, D., & Janoff-Bulman, R. 1978. Lottery winners and accident victims: Is happiness relative? *Journal of Personality and Social Psychology,* 36, 917-927.

Brower, K. 2012. *The wildness within: Remembering David Brower.* Berkeley, CA: Heyday Books.

Daly, H., 1996. *Beyond growth.* Boston: Beacon Press.

Dittmar, H., Bond, R., Kasser, T. and Hurst, M. 2012. The relationship between materialism and personal well-Being: a meta-analysis. Manuscript submitted for publication.

Easterlin, R. A.,1974. "Does Economic Growth Improve the Human Lot?" in Paul A. David and Melvin W. Reder, eds., *Nations and households in economic growth: Essays in honor of Moses Abramovitz.* New York: Academic Press, Inc.

Easterlin, R.A., Angelescu McVey, L., Switek, M., Sawangfa, O., Smith Zweig, J. 2010, "The happiness–income paradox revisited", *Proceedings of the National Academy of Sciences of the United States of America* 107 (52): 22463–22468.

Gallup poll (October 30, 2012). With poverty comes depression, more than other illnesses. Accessed at: http://www.gallup.com/poll/158417/poverty-comes-depression-illness.aspx?utm_source=alert&utm_medium=email&utm_campaign=syndication&utm_content=morelink&utm_term=Wellbeing

Hayes, C. 2013, May. Progress, happiness and going beyond GDP. *Clean Economic Bulletin.* Accessed at: http://myemail.constantcontact.com/Clean-Economy-Bulletin.html?soid=1101847878821&aid=64bp4lwwEsc

Helliwell, J. F., Layard, R. and Sachs, J. (Eds), 2012. *World happiness report*. New York: The Earth Institute, Columbia University.

Kasser, T. and Kanner, A. D., 2004. *Psychology and consumer culture: The struggle for a good life in a materialistic world*. Washington, DC: APA.

Kasser, T. and Ryan, R. M. 1993. A dark side of the American dream: correlates of financial success as a central life aspiration. *Journal of Personality and Social Psychology*, 65, 410-422.

Kasser, T. and Ryan, R. M., 1996. Further examining the American dream: differential correlates of intrinsic and extrinsic goals. *Personality and Social Psychology Bulletin,* 22, 280-287.

Kubiszewski, I., Costanza, R., Franco, C., Lawn, P., Talberth, J., Jackson, T., & Aylme, C., 2013. Beyond GDP: Measuring and achieving global genuine progress. *Ecological Economics*, 93, 57-68.

Lyubomirsky, S.,2013. *The myths of happiness: What should make you happy, but doesn't, what shouldn't make you happy, but does*. New York: Penguin Press.

Maslow, A., & Lowery, R. (Ed.), 1998. *Toward a psychology of being* (3rd ed.). New York: Wiley & Sons.

Meadows, D., Randers, J. & Meadows, D. ,1972. *Limits to growth.* New York: Universe Books.

Pereira, C., 2013, May 3rd. Bhutan becomes happiness lab for Western economists. *Asia Sentinel.* Accessed at: http://www.asiasentinel.com/index.php?option=com_content&task=view&id=5388&Itemid=210

Seligman, M., Steen, T. A., Park, N. and Peterson, C., 2005. Positive psychology progress. *American Psychologist,* 60, 410-421.

Shigehiro Oishi, S., Kesebir, S., & Diener, E., 2011. Income inequality and happiness. *Psychological Science,* 22(9), 1095–1100.

Wackernagel, M. 2012 http://www.footprintnetwork.org/en/index.php/GFN/page/world_footprint/

Wilkinson, R. & Pickett, K., 2010. *The spirit level: Why equality is better for everyone.* London: Penguin.