

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 and 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 wellbeing 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 than 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 meditation 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) 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 Dalai 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 Fitoussi, 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 Paulo 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 Fitoussi, 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 Fitoussi, 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 “biopsychospirit-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.

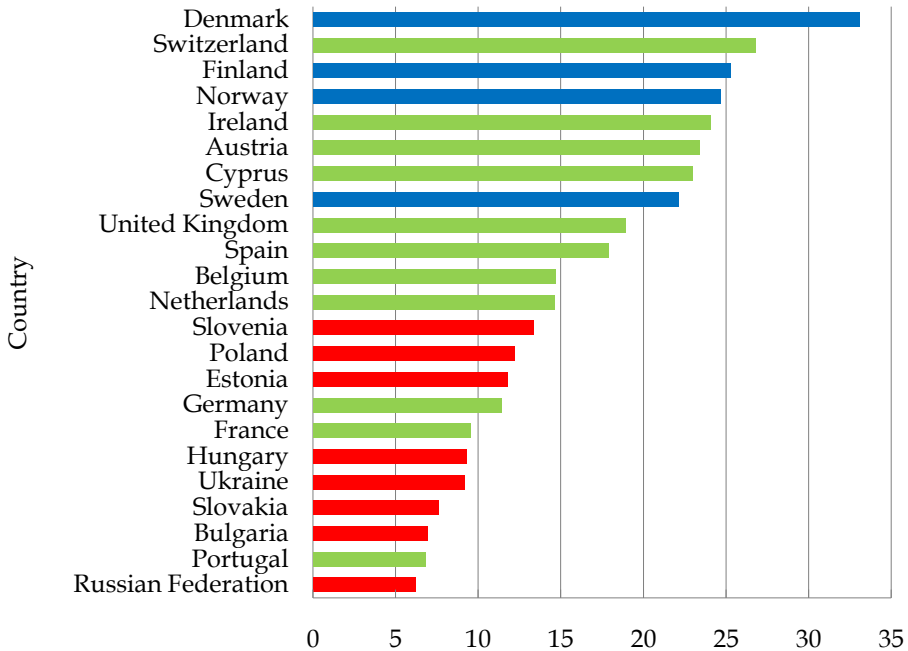


Figure 3. Prevalence of flourishing across European countries participating in the European Social Survey 2006/7 (Percent meeting Criteria for flourishing)

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 be 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.

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