PSYCHOLOGICAL AND SUBJECTIVE WELLBEING: A PROPOSAL FOR INTERNATIONALLY COMPARABLE INDICATORS

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A modified version of this paper was published in the December 2007 issue of Oxford Development Studies.¹

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OPHI gratefully acknowledges the support of the International Development Research Council (IDRC), the Canadian International Development Agency (CIDA) and the UK Department of International Development (DFID) for this research.

¹ Sabina Alkire, Tania Burchardt, Laura Camfield and Geeta Kingdon provided detailed comments on a draft of this article. I am also grateful for the input of Proochnita Ariana, Valery Chirkov, Ed Deci, Ed Diener, Rachel Diprose, Carol Graham, Anna Hiltunen, Ron Inglehart, María Ana Lugo, Michael Steger, Diego Zavaleta and other workshop participants on the content of this paper. All errors remain my own.

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Abstract

This paper sets out a proposal to measure psychological and subjective states of wellbeing in individual and household surveys. In particular, it proposes a short list of seven indicators, and a module containing the relevant questions needed to construct them. The indicators address both endaimonic and hedonic criteria, and cover four aspects of wellbeing: 1) meaning in life; 2) the three “basic psychological needs” of autonomy, competence and relatedness, following self-determination theory; 3) domain-specific and overall life satisfaction; and 4) happiness. The article recommends that further research explore the connections between these indicators, as well as their relationship with objective measures of disadvantage. While reaffirming that perceptual states should not be treated as aims of government policy, it is argued that they may provide a richer understanding of peoples’ values and behavior – and therefore that further research on the subject could deepen our understanding of capability poverty.

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1. INTRODUCTION

Recent years have witnessed an outpouring on research on subjective wellbeing, and growing calls for some variant of happiness to be adopted as a policy goal of both developing and developed countries. The now-common finding that income and happiness are not linked above very low income levels has prompted an upsurge of interest in non-material aspects of wellbeing. As early as 1972, the King of Bhutan announced that the nation’s objective would be to maximize what he termed “Gross National Happiness” in place of gross national product. More recently, policymakers in Australia, Canada, France, Germany, Italy, New Zealand and the United Kingdom have expressed interest in measuring life satisfaction as a component of wellbeing. Research organizations and media outlets regularly publish happiness rankings; one recent effort concluded, for instance, that the Danes are the happiest people in the world, and inhabitants of Burundi and Zimbabwe, the least happy. Scholars too have taken up this call. In an influential book, Happiness: Lessons from a new science, economist Richard Layard (2005) states, “I can think of no nobler goal than to pursue the greatest happiness of all” (p. 234), and advocates several policies with this end in mind. The appeal of happiness as an indicator is manifold: it is uni-dimensional, easy to capture and emotionally appealing.

This emphasis on happiness has also been critiqued on many fronts – chief among them for its fleeting nature, possible conflict with other values, potential undermining of democracy and implicit acceptance of adaptive preferences. At the same time, it is hard to dispute that psychological and subjective states of wellbeing have intrinsic and

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3 Ibid. and “What about gross national happiness”, TIME 10 January 2005.
5 His recommendations include increasing taxes to foster better work-life balance; removing performance-related pay; discouraging geographic mobility; devoting more resources to the poor and mentally ill; introducing more family-oriented employment policies; subsidizing community life; lowering unemployment; reducing commercial advertising and providing better ‘moral education’ (Layard 2005, Ch. 14).
instrumental value. They are a key component of the dimensions proposed in this volume – employment, physical safety, empowerment and the ability to go about without shame – as well as an end result of their attainment. Moreover, they stand to contribute a richer perspective to our understanding of human experience and values, and particularly the importance of their non-material components.

This paper argues that while the new emphasis on subjective wellbeing draws into relief an important topic, its current usage may blur conceptual differences between happiness and satisfaction, and largely overlooks more robust measures of psychological wellbeing. Although use of perceptual measures as policy aims has been critiqued on several grounds, and we reiterate this cautionary approach, the degree to which one finds one’s life to be meaningful, functions positively, and perceives its various aspects approvingly does seem to be capturing something important that might provide a richer understanding of capability, and perhaps of the interactions between capability poverty and subjective well-being. Some research questions that these measures could address, and their potential relevance, are outlined herein.

Our proposal is to derive seven indicators from questions measuring psychological wellbeing, life satisfaction and happiness. The first indicator assesses the extent to which people perceive meaning in their lives. The second set of indicators measures the ability to define and to progress towards meaning; following self-determination theory, it is concerned with the extent to which individuals exhibit relatedness, autonomy and competence. The third indicators seek to determine overall and domain-specific life satisfaction, considering 11 domains that philosophical and psychological accounts raise as important components of a ‘good life’. The final indicator measures happiness. Exploring the relationships between these four types of indicators and the ‘objective’
criteria typically available in national surveys, and their evolution over time, could significantly complement the content and process of anti-poverty policy making.

The remainder of this paper is organized as follows. Section 2 clarifies definitional and measurement issues. Section 3 gives an overview of three main streams in the literature, recommends a focus on particular indicators, and evaluates their strengths and weaknesses. It proposes a short set of questions needed to construct these indicators. Section 4 reviews the limited empirical evidence available on psychological and subjective wellbeing, and puts forth several hypotheses that better data could permit us to explore. Section 5 discusses how this information could enable a richer understanding of anti-poverty policy. Section 6 concludes.

2. BACKGROUND: DEFINITIONS AND MEASUREMENT ISSUES

Several terms recur in the literature and are used in various ways. We follow the basic distinction drawn by several researchers (e.g. Waterman 1993, Ryan and Deci 2000) between endaimonic and hedonic measures, with the former comprising a multifaceted measure of ‘flourishing’, and the latter, happiness and satisfaction – which we suggest are distinct concepts. In this paper, we consider several endaimonic and hedonic measures. Taken together, we consider the endaimonic measures to indicate psychological wellbeing and the hedonic measures to reflect subjective wellbeing. The umbrella term used to denote both the endaimonic and hedonic measures is psychological and subjective wellbeing.

A uniform response structure is adopted for all the recommended questions. Limited work has been done on the optimal response structure for psychological and subjective
questions. Generally, respondents are asked to rank their perceptions on a Cantril ladder scale; at least four categories are recommended. In his work on Quality of Life measures, Cummins recommends 11 steps as it “optimizes respondent discriminative capacity” (IWB 2006, p. 7), but this may not be feasible in a developing country context where low educational levels prevail. Moreover there is some evidence that in different cultural contexts, people may not perceive such scales to be linear with equi-distant intervals. In such cases, it appears more accurate to use a shorter scale and to have labels attached to each interval – though there is a paucity of systematic work comparing the ability of populations from different educational and cultural backgrounds to place themselves on different types of scales (personal correspondence with Robert Cummins, Ed Deci and Michael Steger). Given this lack of rigorous evidence, a cautious approach would suggest use of a reduced set of options.

A recent task force report on evaluating states of health in cross-cultural contexts provides some guidance. Following a review of response structures, the authors conclude, “using five response categories…would seem to be quite reasonable…based on some classic psychological research in the areas of human information processing and questionnaire development” (p. 10). In particular, they argue that “five to nine independent pieces of information represent a maximal cognitive load for most persons”, and that “five response categories appears to be the most efficient…increasing the number of categories beyond five resulted in a progressive loss of discriminative power” (p. 10). Here we adopt a four-response variant for each question, with an even number of responses selected to deter respondents from settling on the mean. In work on

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6 However, although the World Values survey uses a 10 step ladder, Diener’s Satisfaction with Life Scale – implemented in 61 countries (see Suh et al. 1998) – is based on a seven-step ladder.

empowerment, this response structure was found to work well among poor respondents in El Salvador and India. Further research is needed to test the effect of response scales and their interpretation across cultures.

3. MEASURING POSITIVE FUNCTIONING

The main strands of the literature on psychological and subjective wellbeing focus on *eudaimonic*, hedonic and mental health measures, respectively. *Eudaimonic* conceptions also derive from ancient Greek philosophy – notably the work of Aristotle – and were later championed by Mills among others. *Eudaimonic* measures emphasize ‘human flourishing’ – literally *eu* (wellbeing – or good) and *daimonia* (demon or spirit) – and virtuous action, which is argued to be not always congruent with happiness or satisfaction, but to reflect a broader and multi-faceted set of needs. Hedonic measures follow the criteria of maximizing pleasure and avoiding pain, an approach dating back to ancient Greek philosophy that found later expression in the work of Bentham and his followers. The mental health literature is concerned with psychological disorder, the diagnosis of which is based on clinical criteria, but we argue that multi- and cross-cultural contexts call these criteria into question, and for the need to focus more on positive functioning.

*eudaimonic* measures

The first category of measures we consider focuses on *eudaimonia* or ‘human flourishing’. Based on Aristotelian philosophy, *eudaimonic* measures incorporate a more diverse set of principles than their hedonic counterparts, which focus more on pleasure. Sen (1996) writes that “Aristotle saw ‘eudaimonia’ as being constitutively diverse, leading to a heterogeneous view of fulfillment...proceeding...in the direction of a structured

[^8]: [http://www.fas.harvard.edu/~acgei/PDFs/Capabilities/Intro%20to%20the%20study.pdf](http://www.fas.harvard.edu/~acgei/PDFs/Capabilities/Intro%20to%20the%20study.pdf)
diversity of joys” (p. 489). Ryff and Singer (1998) define *eudaimonia* as “the idea of striving toward excellence based on one’s own unique potential”. The measure has the advantage of incorporating process and outcome, giving it both instrumental and intrinsic importance. It also gives due recognition to the role of individual internal cognition in conditioning outcomes. Lyubomirsky et al. (2005) find that external circumstances may account for just about 10 percent of variation between individuals in measures of life satisfaction, with most accounted for by “intentional activities” – i.e., aspects of functioning over which individuals have some control (cited in Huppert et al. 2006, p. 2). In addition, this focus on process ties in with Frey and Stutzer’s (2007) arguments that individuals benefit from what they label ‘procedural utility’ as well as outcomes (p. 9); and that they should become “better able of advancing what constitutes their idea of the good life” (p. 15).

We argue for a two-pronged approach to measuring *eudaimonia* based on: 1) perception of meaning in life – defined by the individual based on his/her own unique potential; and 2) the ability to strive towards excellence in fulfilling this idea. To develop these concepts, we draw upon Steger’s Meaning in Life questionnaire (Steger et al. 2006), and on Deci and Ryan’s measures of the psychological needs associated with goal identification and pursuit, which in turn predict ‘optimal functioning’ (Ryan and Deci 2000, 2001). This focus also ties in with Ryff and Singer’s (in press) assertion that purpose in life and personal growth are the two most *eudaimonic* aspects of wellbeing.
Ryff: Domains of psychological wellbeing

Psychologist Carol Ryff and her colleagues (cf. Ryff and Singer 1998, in press) sought to operationalize the concept of *eudaimonia* through constructs culled from an array of psychological literature. They conclude that six constructs represent distinct points of convergence as to what constitutes psychological wellbeing: autonomy, personal growth, self-acceptance, life purpose, environmental mastery and positive relatedness. In subsequent work, they examine the extent to which individuals combine these characteristics, and their correlations with socio-demographic characteristics, notably age, gender, race/ethnicity and education. For our purposes, these scales have several problems. It is impractical to collect data regarding all six constructs. The cross-cultural comparability of the scale has been challenged (Christopher 1999). Further, it is overly restrictive – for our purposes – in dictating not only what constitutes psychological wellbeing in terms of process – but also what wellbeing *is*. How to combine the six constructs and what the presence of various combinations of the constructs indicates is also unclear.

Meaning in Life

The importance of the search for and presence of meaning recurs in philosophical accounts of the good life from ancient Greece onwards. Psychological attention grew from the 1940s on, in particular through the work of Victor Frankl who asserted that the need for meaning is a basic human drive (Frankl 1963). More recently, several empirical studies find strong links between meaning in life and psychological wellbeing (Zika and Chamberlain 1987, Reker, Peacock and Wong 1987, Ryff and Singer 1989, Steger and Frazier 2005, King *et al.* 2006, Steger *et al.* in press). For instance, Zika and Chamberlain (1987) report that meaning in life was the most consistent predictor they found of psychological wellbeing among college students in the United States. Chamberlain and
Zika (1992) and Shek (1992) find that meaning is positively linked with life satisfaction; Debats et al. (1993) report a positive link with happiness, while Bonebright et al. (2000) establish a positive connection with work enjoyment.\(^9\) The presence of meaning is also reported to be a powerful means of coping with negative circumstances (King et al. 2006). Although different theorists disagree over how to define meaning, they uniformly agree that having meaning in life is crucial (Steger et al. 2006). Steger et al. (2006) make the case for a relativistic conception of meaning, which leaves the concept open to respondent determination; as noted above, this argument accords well with the meaning of *eudaimonia* which stresses that flourishing comes from striving for excellence based on one’s own unique potential.

Very little survey work seeks to elicit respondent perceptions of meaning in their lives. All five waves of the World Values survey provide a rare example, posing the question in Table I in a section on spirituality (Table I).\(^{10}\)

Table I – World Values survey question of meaning of life

<table>
<thead>
<tr>
<th>How often, if at all, do you think about the meaning and purpose of life?</th>
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<tr>
<td>1</td>
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<td>2</td>
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<tr>
<td>3</td>
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<tr>
<td>4</td>
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</tbody>
</table>


This question, however, confounds the search for meaning with the presence of meaning, two constructs that Steger et al. (2006) argue are independent. Steger’s Meaning in Life questionnaire contains separate sub-scales to assess these two concepts. We recommend his scale for ‘presence’ of meaning for several reasons. First, it is indicative of meaning

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\(^9\) Cited in Steger et al. (2006).
\(^{10}\) See Inglehart and Baker (2000) discuss the results of this question, finding that in many countries, the share of the population that ‘often’ thinks about meaning increased over time.
rather than simply a desire for meaning. According to Steger (in press, p. 2), “(p)eople theoretically experience the presence of meaning when they comprehend themselves and the world, understand their unique fit in the world, and identify what they are trying to accomplish in their lives”. While having meaning is associated with psychological wellbeing, the search for meaning is not necessarily healthy; Steger et al. (in press) show that it can arise from different underlying motivations in different people and therefore have positive or negative effects on psychological health. It follows that the presence of meaning is more closely linked with life satisfaction than the search. In addition, Steger’s scale exhibits stronger psychometric properties than other key scales of meaning in life, e.g. Crumbaugh’s Purpose in Life scale and the Life Regard Index (both said to conflate life purpose and satisfaction);\(^{11}\) and Ryff’s purpose in life scale (which has a lower alpha score than Steger’s scale).\(^{12}\)

The questionnaire devised by Steger has not yet been used in many cross-cultural contexts (Steger et al. 2006, p. 90) however, the limited existing evidence suggests its validity in the contexts in which it has been employed.\(^{13}\) Steger reports factorial invariance in US and Japanese samples, and the indication of a similar structure in Spanish samples - though the latter is too small for factorial invariance analysis (personal communication, Michael Steger). The full version of the ‘presence’ questionnaire has five questions, and the short form, three. We draw upon the short form to facilitate survey implementation (Table II).

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\(^{11}\) Zika and Chamberlain (1992) gather critiques of the Purpose in Life Scale and Steger (in press) critiques the Life Regard Index.

\(^{12}\) Cronbach’s alpha is a common test of the extent to which items on a scale are inter-related. The alpha for Ryff’s scale has been reported as .31 while for Steger’s scale it is .75 or higher (Steger, personal correspondence).

\(^{13}\) Steger is aware of versions in German, Portuguese, Chinese, Japanese, Korean, Turkish, South Lesotho, Afrikaans, Hindi and Lebanese (personal communication, Michael Steger).
Table II – Steger’s Meaning in Life questionnaire

Please take a moment to think about what makes your life feel important to you. Please respond to the following statements as truthfully and accurately as you can, and also please remember that these are very subjective questions and that there are no right or wrong answers. Please answer according to the scale below.

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Not at all true</td>
<td>Not very true</td>
<td>Somewhat true</td>
<td>Completely true</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>STATEMENT</th>
<th>SCORE</th>
</tr>
</thead>
<tbody>
<tr>
<td>My life has a clear sense of purpose</td>
<td></td>
</tr>
<tr>
<td>I have a good sense of what makes my life meaningful</td>
<td></td>
</tr>
<tr>
<td>I have discovered a satisfying life purpose</td>
<td></td>
</tr>
</tbody>
</table>

SOURCE: Short-form of Steger questionnaire for presence of Meaning in Life.

Self-determination theory

The focus on meaning in life is complemented by self-determination theory (SDT) which posits three innate psychological needs – for competence, autonomy and relatedness – and theorizes that fulfillment of these needs is essential for psychological growth, integrity and wellbeing (Ryan and Deci 2000, 2001). They conceive of these constructs as factors that foster wellbeing by maximizing one’s potential, rather than as indicative of wellbeing itself. Further they argue that the thwarting of any of these three needs is psychologically harmful. Deci and Ryan developed SDT to explain both goal content and the processes through which goals are pursued. They argue that process and goal content make distinct contributions toward psychological wellbeing – and stress whether goal fulfillment is made in a way that facilitates the three basic needs, and whether it is intrinsically or extrinsically motivated (with the former associated with better motivation, performance and wellbeing).
Evidence suggests SDT is applicable across cultures. Despite cultural, ideological and locational differences, Kenny and Kenny (2006, p. 153) report, “it appears that status, control, and levels of social interaction are universal determinants of subjective happiness across cultures”. Ryan and Deci (2001, p. 147) found that “SDT does not … suggest that the basic needs are equally valued in all families, social groups, or cultures, but it does maintain that thwarting of these needs will result in negative psychological consequences in all social or cultural contexts. Their Basic Psychological Needs Scales\textsuperscript{14} addresses satisfaction with the three needs they identify. The original scale has 21 items - however, the authors of the scale provided a short-form which contains 9 items, 3 in each category (Table III).

Table III – Questions on self-determination

<table>
<thead>
<tr>
<th>A) AUTONOMY</th>
<th>SCORE</th>
</tr>
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<tbody>
<tr>
<td>STATEMENT</td>
<td></td>
</tr>
<tr>
<td>I feel like I am free to decide for myself how to live my life.</td>
<td></td>
</tr>
<tr>
<td>I generally feel free to express my ideas and opinions</td>
<td></td>
</tr>
<tr>
<td>I feel like I can pretty much be myself in daily situations</td>
<td></td>
</tr>
</tbody>
</table>

<table>
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<tr>
<th>B) COMPETENCE</th>
<th>SCORE</th>
</tr>
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<tbody>
<tr>
<td>STATEMENT</td>
<td></td>
</tr>
<tr>
<td>People I know tell me I am competent at what I do.</td>
<td></td>
</tr>
<tr>
<td>Most days I feel a sense of accomplishment from what I do.</td>
<td></td>
</tr>
<tr>
<td>I often feel very capable.</td>
<td></td>
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</table>

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<tr>
<th>C) RELATEDNESS</th>
<th>SCORE</th>
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<tbody>
<tr>
<td>STATEMENT</td>
<td></td>
</tr>
<tr>
<td>I get along well with people I come into contact with.</td>
<td></td>
</tr>
<tr>
<td>I consider the people I regularly interact with to be my friends.</td>
<td></td>
</tr>
<tr>
<td>People in my life care about me.</td>
<td></td>
</tr>
</tbody>
</table>

Source: Short-form of Ryan and Deci Basic Psychological Needs scales.

\textsuperscript{14} http://www.psych.rochester.edu/SDT/measures/needs.html.
Having discussed the importance of *eudaimonic* wellbeing and advocated a focus on meaning in life, and on the three basic determinants of optimal functioning, we now explore hedonic measures and their contribution to an understanding of wellbeing.

**Hedonic measures: happiness and life satisfaction**

Subjective perceptions of wellbeing have three components: a cognitive component (often described as life satisfaction), and positive and negative affect (Diener 1984). The preponderance of positive over negative affect can be described as happiness (Bradburn 1969). The extent to which happiness and unhappiness constitute a single dimension has been challenged, but most recent research finds that they are not independent: “most moments of experience can be adequately characterized by a single summary value on the Good/Bad dimension” (Kahneman 1999, p. 8). We argue for the separate measurement of life satisfaction and happiness, and that satisfaction consider both life overall and several distinct domains that are argued to be important.

Though psychologists carefully distinguish happiness and life satisfaction, many economists use the two measures interchangeably. This blurring is reflected in some ways that these terms appear in national survey instruments. Layard (2005) justifies this interchangeable use on the basis of high correlations between the two variables (p. 255, note 32); Di Tella *et al.* (2003) finds a correlation of .56 for 1975-86 using Eurobarometer data, and Graham (2007) reports correlations of between .50 and .56 for British and Latin American data (p. 4). However, the correlations are not close enough to suggest the indicators are necessarily capturing the same concept. In his analysis of US Gallup poll

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15 Kahnemann (1999) provides a rich discussion of this literature. See also Diener (1984) for a review of this work for the 1970s and early 1980s, and Layard (2005) on more recent research.
16 Easterlin (2003) writes, “I take the terms well-being, utility, happiness, life satisfaction, and welfare to be interchangeable” (p. 3).
17 Key examples occur in the English versions of the 2004 Malawi Integrated household survey and 2007 German Socio-economic panel survey.
data, Ed Diener reports that what he labels ‘judgment variables’ (domain and life satisfaction) and affective variables are distinct (personal correspondence). Moreover, Suh et al. (1998) compare evidence from 61 countries and report that that the extent of correlation varies greatly amongst them, a difference that they attribute to the extent of individualism versus collectivism. World Values data from 1990/93 suggest an average correlation of .41, but a range from .20 (Nigeria) to .57 (West Germany). Survey data (1995/96) from university students in 40 countries yield an average of .46 and correlations of between .07 (Nepal) and .76 (Egypt). The authors conclude that “inner emotional feelings play a more significant role in one’s judgment of overall life satisfaction in individualist nations than in collectivist nations” (p. 486). Because collectivism and per capita income are very highly correlated, the conflation of happiness and life satisfaction appears more important in poor countries than rich ones. However, it has been suggested that the terms happiness and satisfaction – which carry different connotations in English – may translate more or less clearly into other languages and that therefore the range of correlations between the terms may result from such differences (personal communication, Geeta Kingdon); this possibility requires further study. On the basis of the available evidence, we advocate collecting data on life satisfaction and on happiness separately, given that these terms may measure a deep-seated cognitive outlook and affective inclinations, respectively, and could potentially inform research on poverty in somewhat different ways. The question on overall life satisfaction can be phrased in the following manner (Table IV):

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18 Egypt appears as an outlier in this case.
19 Hofstede (2001) reports a correlation of .84 between his index of Individualism-Collectivism and per capita GDP in 50 countries (cited in Allik and Realo 2004, p. 46).
20 Kingdon comments: “the words ‘satisfaction’ and ‘contentment’ both would be translated into Hindi as ‘santushti’ and this is closer in meaning to contentment than to satisfaction, and thus perhaps further from the notion of ‘happiness’ (khusi or prasanata in Hindi) than is the case in English” (personal communication).
Table IV – Question on overall life satisfaction

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<tr>
<td>In general, would you say that you are satisfied with your life? Would you say that you are:</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>Very satisfied</td>
</tr>
<tr>
<td>2</td>
<td>Fairly satisfied</td>
</tr>
<tr>
<td>3</td>
<td>Not very satisfied</td>
</tr>
<tr>
<td>4</td>
<td>Not at all satisfied</td>
</tr>
</tbody>
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Source: Eurobarometer, [www.iza.uni-koeln.de/research/eurabor](www.iza.uni-koeln.de/research/eurabor).

Comparing survey responses with the results of physiological, psychological and third-party indicators leads to the conclusion that “subjective well-being surveys do capture an underlying ‘psychological reality’” (Kenny and Kenny 2006, p. 151; see also Frey and Stutzer 2007, p. 3). A global measure, such as life satisfaction, has the strong advantage that it “covers all relevant resources, and not just the few that are easily measurable and deemed relevant” (Veerhoven 2007, p. 219). However, in our view, this strength is offset by a clear weakness. Asked in isolation from domain-specific satisfaction, global questions fail to provide information regarding the components of subjective wellbeing. Therefore they ultimately tell us very little about why people feel as they do, as well as how people may aggregate various components of their lives to reach an overall assessment. Moreover, global questions “are more prone to cognitive or mood biases than domain-specific ones” (Schwartz and Strack 1999, cited in Camfield 2003, p. 7).

Given these limitations, some work – particularly that focusing on capturing Quality of Life\(^\text{21}\) – considers satisfaction with respect to specific domains deemed to be important to individuals. Satisfaction in various domains might be reinforcing or offsetting. For instance, in a study of pavement dwellers in Calcutta and homeless people in the United States, Biswas-Diener and Diener (2006) found that the former are more satisfied than the latter overall. While both groups perceive dissatisfaction relating to their lack of

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\(^{21}\) See Hagerty et al. (2001) for a review of 22 indicators commonly used in this area.
housing, this is somewhat offset in the Calcutta sample by the satisfaction the respondents derived from their social relationships.

Some research on this theme asks the respondent to identify the domains they consider relevant, but this would be unmanageable in large-scale internationally comparable surveys. Moreover, philosophical and psychological studies suggest considerable agreement as to the components of human flourishing, which can be drawn upon to identify domains that are likely to be important. Ranis et al. (2006) put forth ‘requirements for human flourishing’ that they identify in six key philosophical and participatory accounts – Rawls (1972), Finnis et al. (1987), Doyal and Gough (1991), Nussbaum (2000), Narayan-Parker (2000) and Camfield (2005) – and group these items into eight domains: bodily wellbeing, material wellbeing, mental development, work, security, spiritual wellbeing, empowerment and political freedom, and respect of other species (Table V).

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22 The Bath research group on Wellbeing in Developing Countries in its “Person Generated Index of Quality of Life” asks the respondent to “think of the areas of your life that are most important” and to identify up to five such areas.
Table V – Requirements for ‘human flourishing’

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<tbody>
<tr>
<td>Defining concepts</td>
<td>Primary goods</td>
<td>Basic human values</td>
<td>Basic Needs and Intermediate needs</td>
<td>Central human functional capabilities</td>
<td>Dimensions of well-being</td>
<td>Quality of life</td>
</tr>
<tr>
<td>Bodily well-being</td>
<td>Bodily life — health, vigorous and safety</td>
<td>Physical health, -Nutrition: food and water -Health care -Safe birth control and child bearing -Safe Physical environment</td>
<td>Life Bodily health Body integrity</td>
<td>Bodily well-being Access to health services Good physical environment</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Material well-being</td>
<td>Income and wealth</td>
<td>Protective housing Economic security</td>
<td>Material well-being Food Assets</td>
<td>Food Shelter</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mental development</td>
<td>Knowledge and reasonableness</td>
<td>Basic education</td>
<td>Senses, Imagination, Thought Emotions Practical reason Play</td>
<td>Education (Bangladesh and Ethiopia, not Thailand or Peru)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Work</td>
<td>Freedom of occupation</td>
<td>Skillful performance in work and play</td>
<td>Work</td>
<td>Work</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Security</td>
<td>Physical security</td>
<td>Civil peace Physically safe environment Lawfulness (access to justice) Personal physical security Security in old age</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Social relations</td>
<td>Social bases of self-respect</td>
<td>Friendship</td>
<td>Significant primary relationships</td>
<td>Social well-being -Family -Self-respect and dignity -Community relations</td>
<td>Family</td>
<td></td>
</tr>
<tr>
<td>Spiritual well-being</td>
<td>Self-integration Harmony with ultimate source of reality</td>
<td>Autonomy of agency Civil and political rights Political participation</td>
<td>Control over one’s environment</td>
<td>Freedom of choice and action</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Empowerment and political freedom</td>
<td>Rights, liberties, opportunities Powers and prerogatives of office and positions of responsibility Freedom of movement</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Respect for other species</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Other species</td>
<td></td>
</tr>
</tbody>
</table>

Source: Ranis et al. (2006, p. 4, Table 1).
Notes: Derived from Alkire (2002), Doyal and Gough (1991), Narayan et al. (2000), Camfield (2005). a. Intermediate needs are instrumental for the achievement of Basic needs, Basic needs are in bold and intermediate are in normal type.
Cummins and his colleagues propose additional criteria for domain selection, two of which are important here:\footnote{See Cummins (1996, 2002a, 2002b); International Wellbeing Group (2006), and Cummins et al. (2007).} the domains “must be able to contribute unique variance to the prediction of Life as a Whole” as determined by regressing potential domains against an overall ‘satisfaction with life’ indicator; and that they “should be able to be represented both objectively and subjectively” (Cummins 2002a, n.p.).

Following a review of over 1,500 psychological studies, Cummins (1996) identifies seven domains as commonly relevant: material wellbeing, health, productivity, intimacy, safety, community and emotional wellbeing (Table VI). He later removes emotional wellbeing, claiming that it cannot be measured objectively, and adds ‘spirituality or religion’ and, following September 11, an amorphous ‘future security’ category (IWG 2006).\footnote{The respondent is left to determine how she or he defines security.}\footnote{The respondent is left to determine how she or he defines security.} Cummins reports that these domains contribute a unique amount of variance of ‘overall life satisfaction’ and that correlation among the domains exceeds correlations within each category. While the domains contribute uniquely to overall wellbeing on average, this does not imply that each is important in every country they study.\footnote{For example, spiritual or religious wellbeing does not make a unique contribution to overall SWB in Australia but it is important in Columbia (IWG 2006, p. 9).} Cummins’ scales, which ask the respondent to identify on a 0-10 scale how satisfied they are with each domain, has demonstrated strong psychometric properties, notably construct and convergent validity, reliability and sensitivity (IWG 2006). IWG (2006) reports that variance within the eight domains together accounts for about 50-55 percent of variance in overall life satisfaction. In a review of 22 Quality of Life studies, Hagerty \textit{et al.} (2001) score Cummins’ measure more highly than 20 others.\footnote{It shares top ranking with Veerhoven’s Happiness-Adjusted Quality of Life measure, although this is a measure of overall happiness and does not address domain-specific contentment.}

\begin{itemize}
\item \item
\end{itemize}
Although deriving from different scholarly approaches, the domains identified by these two approaches exhibit very strong convergence, with the exception of empowerment and political freedom, which feature strongly in the philosophical accounts but not in the

<table>
<thead>
<tr>
<th>Material well-being</th>
<th>Health</th>
<th>Productivity</th>
<th>Intimacy</th>
<th>Safety</th>
<th>Community</th>
<th>Emotional well-being</th>
</tr>
</thead>
<tbody>
<tr>
<td>Car (1)</td>
<td>Health (22)</td>
<td>Achieve success (1)</td>
<td>Child interaction (1)</td>
<td>Amount of privacy (1)</td>
<td>Acq. and contacts (1)</td>
<td>Beautiful things (1)</td>
</tr>
<tr>
<td>Clothes (2)</td>
<td>Hlth./Func. (2)</td>
<td>Act. available (1)</td>
<td>Children (4)</td>
<td>Control (1)</td>
<td>Area you live in (2)</td>
<td>Comfort from religion (1)</td>
</tr>
<tr>
<td>Econ. situation (2)</td>
<td>Incl. perfor. (1)</td>
<td>Employment (1)</td>
<td>Contact with family (1)</td>
<td>Control over life (1)</td>
<td>City (1)</td>
<td>Emot. adjustment (1)</td>
</tr>
<tr>
<td>Food (2)</td>
<td>Physical fitness (1)</td>
<td>House-work (1)</td>
<td>Family (7)</td>
<td>Contr. pers. circum. (1)</td>
<td>Clue belong to (1)</td>
<td>Free-time activity (1)</td>
</tr>
<tr>
<td>Finances (1)</td>
<td>Phys. strength (1)</td>
<td>Job (1)</td>
<td>Family life (8)</td>
<td>Financial security (3)</td>
<td>Community (2)</td>
<td>Pain (2)</td>
</tr>
<tr>
<td>Fm. situation (1)</td>
<td>Personal health (2)</td>
<td>Paid employ. (2)</td>
<td>Family relations (3)</td>
<td>How handle prob. (1)</td>
<td>Country (1)</td>
<td>Hobbies (3)</td>
</tr>
<tr>
<td>Home (1)</td>
<td>School (2)</td>
<td>Voc. (1)</td>
<td>Friends (7)</td>
<td>Legal and safety (1)</td>
<td>District (2)</td>
<td>Leisure (1)</td>
</tr>
<tr>
<td>House (5)</td>
<td>Vocation (1)</td>
<td>Voc. situation (1)</td>
<td>Living partner (1)</td>
<td>Safety (5)</td>
<td>Education (7)</td>
<td>Leisure activities (1)</td>
</tr>
<tr>
<td>House appear. (1)</td>
<td>What accompl. (1)</td>
<td>Marriage (7)</td>
<td>Secure from crime (1)</td>
<td>Sec. of belongings (2)</td>
<td>Education facilities (1)</td>
<td>Life opportunities (1)</td>
</tr>
<tr>
<td>Housing (4)</td>
<td>Work (10)</td>
<td>Number of friends (1)</td>
<td>Parenthood (2)</td>
<td></td>
<td>Get on other people (2)</td>
<td>Non-work (1)</td>
</tr>
<tr>
<td>Income (2)</td>
<td>Work and ed. (1)</td>
<td>Partner relationship (2)</td>
<td></td>
<td></td>
<td>Helping others (1)</td>
<td>Overall comfort (2)</td>
</tr>
<tr>
<td>Living situation (7)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Location of home (1)</td>
<td>Psychol./Spiritual (2)</td>
</tr>
<tr>
<td>Mater. poss. (1)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Neighborhood (4)</td>
<td>Reading (2)</td>
</tr>
<tr>
<td>Pay (3)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>People in comm. (1)</td>
<td>Recreation (4)</td>
</tr>
<tr>
<td>Place of resid. (1)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>People see socially (1)</td>
<td>Relax/Sitting around (1)</td>
</tr>
<tr>
<td>Quality of meals (1)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Rel. others in comm. (1)</td>
<td>Religion (2)</td>
</tr>
<tr>
<td>Savings (1)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Religion (2)</td>
<td>Self (1)</td>
</tr>
<tr>
<td>Socio-economic (2)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Serv. and facilities (2)</td>
<td>Self-esteem (1)</td>
</tr>
<tr>
<td>Stand. of living (6)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Social life (3)</td>
<td>Social-acclimation (1)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Social relations (6)</td>
<td>Social (1)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Social organisations (1)</td>
<td>Visiting (1)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Spiritual life (1)</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Sports or games (2)</td>
<td>Time to do things (1)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Take night out (1)</td>
<td>Yourself (1)</td>
</tr>
</tbody>
</table>

Residual Terms: Ability to get around (1), Ability to manage self care (2), Amount you worry (1), Appearance (1), Basic child care (1), Being a housewife (1), Beliefs of the institution's movement (1), Bicultural (1), Body (2), Bone marrow transplantation (1), Children's education (2), Consumption (1), Cultural life (1), Daily activities (1), Democratic standards (1), Eating (2), Follow politics/voting (1), Future (1), Government (2), Government handles economy (1), Grocery shopping (1), Health care (2), House chores (1), Household maintenance (1), Housework (1), Immigration (1), Level of democracy (1), Life as a whole (1), Life in general (1), Life in the country (1), Life in USA (1), Living arrangements (1), Local council (1), Local government (2), Medical service (1), National Government (1), Number of others in home (1), Personal care (1), Place of living compared with hospital (2), Police and courts (3), Preparing cooking food (1), Pressure at work (1), Psychiatric service (1), Relationship with partner (1), Resting (1), Shopping (1), Singlehood (1), Sleeping (1), Social work service (1), Space outside home (1), Television (2), Transportation (2), Travel (1), Trip to work (1), Welfare services (2), Your transplantation (1).
psychological studies. Because empowerment is considered a separate ‘missing dimension’ (see Ibrahim and Alkire, this volume), we do not dwell on this discrepancy.

We use Cummin’s framework to structure the basic list of domains (Table VII) that appears in the recommended survey question (Table VIII). We propose specific items within each domain, though this selection remains open to debate. Within the material wellbeing domain, we select food and housing as the most basic of needs for the poor, and income – which represents a catch-all for other types of material needs. Under productivity, we select work. For security, we specify an interest in physical safety. We clarify ‘intimacy’ with reference to friends and family. Under community – which emerges as important particularly in Cummins’ work and also in Voices of the Poor – we focus on education, one’s neighborhood and also on the ability to help others. Finally, we include a category focusing on wellbeing derived from spiritual, religious or philosophical beliefs (which could include nature, art, music).

<table>
<thead>
<tr>
<th>DOMAINS</th>
<th>ITEMS OF INTEREST</th>
</tr>
</thead>
<tbody>
<tr>
<td>Material wellbeing</td>
<td>Food</td>
</tr>
<tr>
<td>Health</td>
<td>Health</td>
</tr>
<tr>
<td>Productivity</td>
<td>Work</td>
</tr>
<tr>
<td>Security</td>
<td>Physical safety</td>
</tr>
<tr>
<td>Intimacy</td>
<td>Friends and family</td>
</tr>
<tr>
<td>Community</td>
<td>Neighborhood</td>
</tr>
<tr>
<td></td>
<td>Ability to actively helping others</td>
</tr>
<tr>
<td>Spirituality/religion</td>
<td>Wellbeing from spiritual religious or philosophical beliefs.</td>
</tr>
</tbody>
</table>

27 Ed Diener finds helping others – through acts such as donating time and money to charity, and helping strangers – to strongly influence wellbeing (personal correspondence, Ed Diener). See also Huppert et al. (2006).
Table VII – Selected domains and items of interest within each
Table VIII – Question on domain-specific satisfaction

Overall, how satisfied are you with (domain)? Are you…

1 Very satisfied
2 Fairly satisfied
3 Not very satisfied
4 Not at all satisfied

<table>
<thead>
<tr>
<th>Domain</th>
<th>Specific item(s)</th>
<th>Satisfaction level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Material wellbeing</td>
<td>Food</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Housing</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Income</td>
<td></td>
</tr>
<tr>
<td>Health</td>
<td>Health</td>
<td></td>
</tr>
<tr>
<td>Productivity</td>
<td>Work</td>
<td></td>
</tr>
<tr>
<td>Security</td>
<td>Physical safety</td>
<td></td>
</tr>
<tr>
<td>Intimacy</td>
<td>Friends &amp; family</td>
<td></td>
</tr>
<tr>
<td>Community</td>
<td>Education</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Neighborhood</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Ability to help others</td>
<td></td>
</tr>
<tr>
<td>Religion/spiritual</td>
<td>Wellbeing from spiritual, religious or philosophical</td>
<td></td>
</tr>
<tr>
<td>wellbeing</td>
<td>beliefs</td>
<td></td>
</tr>
</tbody>
</table>

Source: The domains used are adapted from The International Wellbeing Group (2006) Personal Wellbeing Index.
Note: The 4-scale measure has been used in Eurobarometer surveys since 1973 (www.za.uni-koeln.de/research/eurolabor) and is feasible for enumerator-administered questionnaires in developing countries.

Nationally-representative surveys of developed countries now routinely include both global and domain-specific questions regarding life satisfaction, and global questions are increasingly in evidence in developing country settings.28 Hagerty et al. (2001) comment of the WHO Quality of Life instrument that “no justification or rationale” is given for the selection of the included domains (p. 14) – which cover education, job, standard of

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28 Appendix I lists the domains included in several major survey instruments (the US General Social Survey, German Socio-economic Panel Survey, British Panel Survey, European Social Survey, European Quality of Life Survey and World Values Survey).
living, accommodation, family life, health and social life – however this comment applies more generally to all the nationally-representative surveys that we reviewed.

The question of how to aggregate satisfaction in the various items and/or domains of life to derive an overall indicator of life satisfaction is an important one. Early versions of Cummins’ index sought to combine the perceived importance of each domain with a satisfaction score to derive a multiplicative composite, but numerous subsequent studies have concluded that such efforts are flawed conceptually and psychometrically (Trauer and Mackinnon 2001, Russell and Hubley 2005, IWB 2006). The critiques of this practice are numerous. Key amongst them are the views that the resulting composite blur satisfaction and importance – the same score can result from high satisfaction/low importance or the opposite combination; that satisfaction scores already contain a judgment as to their importance, with very low and high scores suggesting that the respondent values these categories highly; and that respondents might be predisposed to adapt their view of the importance of a domain relative to their satisfaction with it. Moreover, a number of authors have found that the weights derived from such an exercise performed either no better or modestly better than a similar exercise with no weights (Andrews and Withey 1976, Hagerty et al. 2001, Trauer and MacKinnon 2001). Russell and Hubley (2005) sum up the prevailing scholarly consensus on this issue: “(f)ormance weighting, in the form of the multiplicative model, should be abandoned for the present” (p. 127). As a result, we do not propose collecting information on domain importance.

Finally we employ the variant of the ‘happiness’ question that has been used most frequently, having appeared in 190 nationally-representative surveys worldwide (Table
IX). Note that we recommend placing this question above domain-specific questions in actual surveys to avoid response bias.

Table IX: Question on happiness

<table>
<thead>
<tr>
<th>Taking all things together, would you say you are:</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Very happy</td>
</tr>
<tr>
<td>2 Rather happy</td>
</tr>
<tr>
<td>3 Not very happy</td>
</tr>
<tr>
<td>4 Not at all happy</td>
</tr>
</tbody>
</table>


In short, we propose considering two aspects of subjective wellbeing – satisfaction and happiness – and recognizing the distinction between them. Before proposing specific indicators and questions to ground the concepts this paper has advocated so far, the decision not to include mental health measures is briefly reviewed.

Measures of mental ill-being

In theory, measures of mental ill-being – which purport to be based on ‘objective’ clinical criteria, and to be associated with clear thresholds – would seem to present clear measures of negative functioning. However, depression and suicide, which emerged as the most obvious measures, and have been incorporated into certain surveys, were both discarded. Suicide may indicate a lack of meaning/happiness however it has numerous causes; for instance, it has been documented as one response to acute negative shocks such as unemployment (see Sen 2000) or crop failure. Further, a growing body of evidence suggests suicides are strongly influenced by cultural norms (Boldt 1988, Vijayakumar et al. 2005, Colucci 2006). Measures of depression were also rejected owing to a lack of cross-cultural comparability – the manifestation of depression is in some ways socially and culturally constructed (Patel 2001, Patten 2003), while diagnostic

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29 The British Household Survey and European Social Survey (Round 3) contain several questions relating to depression.
questionnaires are often biased by Western standards (Patten 2003). Consequently, it
would not be fruitful to obtain measures of either depression or suicidal
attempts/tendencies from household surveys to undertake international comparisons.
Further, it is not clear that the measurement, diagnosis and treatment of mental illness
should be considered apart from policies geared toward other health issues. Finally,
“positive mental states are more than the absence of symptoms” (Huppert and
Whittington 2003, p. 107). A focus on these illnesses would not discriminate at all
amongst the majority of people at any time that do not suffer from either condition.
Given a context in which most work on psychological wellbeing has focused on illness,30
there is a need for a greater emphasis on measures of positive function.

So far, we have presented evidence for the importance of measuring both psychological
and subjective wellbeing, and argued for particular approaches to measuring each
concept. The next section proposes specific indicators and questions to accomplish this
task.

The questionnaires used to derive the endaimonic indicators have yet to be incorporated on
a large scale in national surveys; two partial exceptions are the British Household Panel
Survey and the third round of the European Social Survey. 31 The questionnaires
psychologists use to derive these indicators have been subjected to extensive testing for
validity, reliability and accuracy, but largely among US college students: further scrutiny is
needed, particularly in developing countries. Since the 1950s, in developed countries,
researchers have captured data on hedonic measures such as life satisfaction (Keyes

30 Myers (2000) finds 100 times the number of mentions of anxiety as life satisfaction in psychological abstracts since
31 This round of the European Social survey contained a module on “personal and social wellbeing” (Huppert et al.
2006), however questions from various scales seem to be included in a somewhat ad hoc manner, so it is difficult to
discern exactly what is being measured. The findings are not yet in circulation.
2006), while efforts in the last two decades have extended to developing countries –
giving an ample body of data upon which to build.

4. RESEARCH QUESTIONS

Collecting this data would permit testing of a number of potentially interesting research
hypotheses regarding the relationship between various psychological and subjective
aspects of wellbeing, and the relationship between these measures and ‘objective’
conditions, particularly those relating to poverty. We put forth the following issues as a
potential research agenda.

Identification of vulnerable groups

Research is needed to better understand the extent to which external factors (i.e., factors
beyond the individual) influence psychological and subjective wellbeing, versus the extent
to which they are conditioned by internal factors such as optimism, extroversion, etc.
However this is a complex undertaking with onerous data requirements, and therefore
falls beyond the scope of most large-scale surveys.32 Some work suggests some consistent
socio-demographic correlates of these subjective/psychological indicators – though more
work is needed to illuminate mechanisms and the direction of causality. Here, panel data
would be very valuable.

Evidence from several surveys identifies a common set of correlates of subjective
wellbeing. Empirical work points to a U-shaped relationship between satisfaction and age
(Helliwell 2002, World Values survey; Graham and Felton 2005, Latinbarometer); and
posits positive relationships with between subjective wellbeing indicators and education,
marriage, health, wealth, employment and retirement (Blanchflower and Oswald 2002,

32 Potential data needs might include basic temperament (optimism, extroversion, neuroticism etc), detachment from
material things, current mood, extent of faith in the divine (Geeta Kingdom, personal communication). Knight and
Song (2006) include mood in their panel work in China.
US General Social Survey and Eurobarometer; Helliwell 2002; Di Tella et al. 2003, Eurobarometer; Graham and Felton 2006).

Relatively little work so far focuses on the eudaimonic indicators. Using small US samples, Ryff and colleagues (Ryff et al. 2003, Ryff and Singer, in press) explore the socio-demographic correlates of various facets of psychological wellbeing. Ryff and Singer (in press) find that autonomy and environmental mastery increase with age, while purpose in life and personal growth – which they cite as the two most eudaimonic aspects of wellbeing – decline with age, calling attention to “current societal challenges in providing older persons with meaningful roles and opportunities for continued growth” (n.p.). They also report that psychological wellbeing tends to increase with education – particularly the constructs of purpose in life and personal growth. This limited evidence serves to demonstrate that “opportunities for self realization are not equally distributed but occur via the allocation of resources, which enable only some to make the most of their talents and capabilities” (Dowd 1990 cited in Ryff and Singer, in press). Further, Ryff et al. (2003) find that women and racial/ethnic minorities tend to exhibit greater purpose in life and autonomy than the reference group (of white males), but this is offset to the extent that they perceive high levels of societal discrimination.

**Inter-group relationships (psychological and subjective indicators)**

Psychological wellbeing, happiness, meaning and life satisfaction appear to be distinct concepts but positively associated. The form of association between them requires further exploration. Steger et al. (2006) find a correlation of .41 between meaning and life satisfaction. As noted above, correlations between happiness and life satisfaction average about .5, but span a wide range. There is a further question of causation. Presently, the literature does not yet convincingly distinguish means and ends with

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33 Some earlier studies of meaning of life find higher correlations (e.g. Zika and Chamberlain 1992) but the ‘purpose of life’ scale used in these studies was shown to be psychometrically flawed (Steger, personal communication).
respect to the various indicators,\textsuperscript{34} e.g., it is unclear the extent to which the psychological needs may determine the subjective states or \textit{vis a versa}. Diener reports on the basis of US Gallup poll data that learning something new (one measure of competence) and deciding how to spend one’s time (indicative of autonomy) are strong predictors of subjective wellbeing (Ed Diener, personal correspondence). He further observes that the social and autonomy variables predict positive affect quite well. However, far more work is needed to determine which indicators appear to be causal or if indeed they are jointly determined.

\textit{Relationships between subjective/psychological indicators and ‘objective’ characteristics, particularly those associated with poverty.}

Available data suggest ‘objective’ conditions and subjective satisfaction do not always correlate, raising the need to be aware of this divergence and of temporal trends. Further, while psychologists have amassed a wealth of evidence regarding determinants of optimal psychological functioning, little is known about how they relate to ‘objective’ indicators.

So far, work has concentrated largely on the correlation of subjective indicators and income/material wellbeing. The so-called Easterlin paradox (see Easterlin 1974, 1995) refers to the now-widely accepted finding that while within any given country, wealthier people tend to be happier than poorer ones, above a certain low level of average per capita income (pegged somewhere between USD 10,000 and 20,000), there is no relationship between average income and subjective wellbeing either among countries or within countries over time (Figures I and II).

\textsuperscript{34} Geeta KIngdon made this comment in relation to this study but it applies more generally to the literature presently.
Figure I – Per capita income and happiness in the 1990s, numerous countries\textsuperscript{35}

\textbf{Happiness (Index)}

![Graph showing the relationship between income per head and happiness](image)

\textit{Source: Inglehart and Klingemann (2000). Figure 7.2 and Table 7.1. Latest year (all in 1990s).}

Figure II – Income and life satisfaction in the United States, 1940-2000

![Graph showing the relationship between income and life satisfaction](image)

\textit{Source: Diener and Seligman 2004, p. 3.}

This lack of correlation recurs in other measures based on perceptions of income. For instance, subjective measures of poverty are sometimes found to be higher than

\textsuperscript{35} Taken from Layard 2003, p. 18.

Apart from this work on income-based poverty lines, little research engages the relationship between other aspects of poverty and subjective indicators, and no nationally-representative work was found in any country exploring the connections between any of the psychological indicators and any objective measures. Further work is needed to reconcile these subjective and objective dimensions, and particularly to probe the role of adaptive preferences – which we discuss in more detail below.

5. CRITIQUING PSYCHOLOGICAL/SUBJECTIVE MEASURES AS A POLICY GOAL

A focus on happiness in particular, and psychological and subjective states more generally, as aims of government policy have been subject to strong critiques on several grounds. These include the nature of happiness; a possible conflict with other important values; the potential undermining of democratic process; and an implicit acceptance of adaptive preferences. We argue that these objections are serious enough to caution against policy seeking to maximize psychological and subjective wellbeing, but that the indicators nonetheless have a role in informing policy.
Nature of happiness

Happiness is acutely “responsive to short-term circumstances” (Helliwell 2002, p. 5). In other words, it is a fleeting, transient emotion that can be affected by numerous factors ranging from bad weather to the time of day at which a survey is conducted. It can be swayed by “the fate of the national football team or a recent election… as much as economic factors” (Graham and Pettinato 2000, p. 8). These obstacles appear intrinsic to the nature of happiness rather than suggestive of the need for methodological refinement.

Moreover, a focus on happiness does not provide a means of evaluating the potential trade-off between happiness in the short- and long term. One might derive happiness from having written a book; this does not imply every day of writing is blissful. If we condition our activities on current positive affect, few long-term projects would be attained. People often willingly undergo considerable sacrifices in the short-term in the expectation that this will bolster their long-term happiness; a single-minded focus on maximizing current positive affect attributes little weight to this potential-trade off.

Third, repression of emotion is not healthy; happiness not always a positive response to life circumstances: “under some conditions (e.g. the death of a loved one) a person would be considered to be more fully functioning, and, ultimately, to have greater well-being, if he or she experienced rather than avoided the negative feeling of sadness” (Ryan and Deci 2001, p. 150-151). Ryan and Deci (2001) cite several studies suggesting that emotional disclosure is indicative of psychological wellbeing (p. 151).
Conflict with other values

Subjective wellbeing may conflict with other values and the logic for putting it ahead of other values is unclear. While some philosophers – notably Bentham – have privileged happiness, Scotus argued that happiness should be equal with justice, while Kant argued for the primacy of duty (Kenny and Kenny 2006, p. 35-36). Sen (1996) discusses the potential pursuit of plural values, putting forth the Aristotelian concept of a “structured diversity of joys” (p. 490). In their daily lives, people often privilege other values – such as self-reliance or duty – over happiness. Frey and Stutzer (2007) observe that a single mother might value responsibility to her children over her own happiness. McGregor and Little (1998) point to the seeming paradox that while parenthood is associated with lower hedonic indicators, this does not deter many couples from having children.

Democratic process

The extent to which the subjective indicators could and should be provided by the state has been questioned. One problem is that individuals, communities and/or nation states may derive meaning from causes that can harm others (e.g., fascist ideologies). Further, Frey and Stutzer discuss the pernicious consequences for the democratic process of a focus on maximizing happiness – first, of targeting an outcome over procedure, and second, of policies that seek to maximize happiness. They argue:

a happiness maximization approach is inimical to democracy. It disregards the interaction between citizens and politicians, the interest representation by organized groups and the concomitant information and learning process… People have preferences for processes over and above outcomes

(Frey and Stutzer, 2007, p. 10).
Taking away “procedural utility” reduces individual autonomy and therefore wellbeing. Moreover, a happiness maximization policy would fail to provide any rule regarding “the scope and limitations of government intervention in the private sphere” (p. 9). Further, such policy has the potential to distort the relationship between government and individuals – both by giving government an incentive to manipulate happiness (or use happiness to justify policies that would be otherwise unjustifiable), and by giving individuals an incentive to misrepresent their wellbeing (p. 10-11). Rather than maximizing happiness, they argue that happiness research should seek “to improve the nature of the political processes. Individuals should become better able to advance what constitutes their idea of the good life, both individually and collectively” (p. 15).

Adaptive preferences

Any measure of subjective wellbeing fundamentally cannot account for the fact that people’s valuations of their circumstances is in part a function of their reference frame, the expectations that they hold for themselves – and in the case of deprived persons, these may adapt quite sharply. Amartya Sen has repeatedly drawn attention to this significant problem, often called ‘adaptive preferences’. For example, economic theory usually interprets welfare in terms of psychological happiness. Sen has observed both empirically and theoretically that the magnitude of change in subjective well-being may not track in any predictable fashion the objective change that occurs. He often gives the example of how the perennially deprived become reconciled with their circumstances and appreciative of small mercies, thus their desires are muted and their psychic pleasure at small improvements to their situation is disproportionate to the benefit judged from another perspective. Empirically, he has demonstrated this using data from Kerala and Bihar in India. In the former, where widows’ life expectancies were relatively high, and

36 The government of Bhutan’s policies toward Nepalese refugees are often considered in this light.
morbidity low, the self-reported health status was far lower than widows in Bihar whose objective circumstances were far more disconcerting. The widows in Bihar had become used to their circumstances and reported satisfaction with their health.\(^{37}\)

Advocates of policy based on subjective/psychological indicators cannot address this problem adequately. On the one hand, people living in an abject state often perceive themselves to be far better off than their objective circumstances would suggest. On the other hand, there is evidence of a ‘hedonic treadmill’ (Brickman and Campbell 1971) such that once people’s objective conditions begin to improve, their tastes alter also, negating much of the subjective impact of the objective gain; recent research found that a 1 percent gain in income raises aspirations by between .35 and .65 percent (Van Praag and Frijters 1999; see also Stutzer 2004). Similarly, Brickman et al. (1978) demonstrate that paraplegics after a period of hardship, return to almost their previous levels of happiness, while lottery winners become not much happier than they had been previously. Some research suggests that income inequality is associated with lower subjective well-being (Blanchflower and Oswald 2003, Alesina et al. 2004, d’Ambrosio and Frick 2004, Graham 2005 and Graham and Felton 2006). At the same time, considerable empirical evidence supports the view that those experiencing relative deprivation are rarely the most objectively deprived; ‘frustrated achievers’ in the middle of the income ladder are more likely to be dissatisfied than those at the bottom (Graham and Pettinato 2000).

The aforementioned studies are all concerned with habitation to income. Some recent work probes whether such effects apply to other dimensions of wellbeing such as marriage, divorce, and spending time with friends and family. Frank (2004) argued that

adaptation sets in with regard to conspicuous consumption but not with respect to consumption of ‘intangible’ goods; Clark (2003) however, found evidence of limited habituation with respect to unemployment, marriage and social activity – but that it is likely to be weaker than for income. This tentative evidence clearly complicates the use of subjective data to inform policy decisions; further work is needed to illuminate better adaptive preferences and their manifestation.

Richer appraisal of policy options at a micro- and macro-level

These reservations notwithstanding, psychological and subjective measures can provide one basis on which to evaluate (potentially competing) policies. An understanding of subjective perceptions sheds light on what people value and the extent to which they value material and non-material criteria. For instance, past studies have highlighted the importance of relational dynamics among individuals and within communities to wellbeing. Further, the limited empirical evidence shows some systematic differences in the way people perceive various macro-economic conditions too; an understanding of these differences might allow for the fuller appraisal of policy options. Huppert et al. (2006) write:

Whilst it is not clear that the role of governments is to try to make us happy, it is clear that policies do have a profound effect on the societies and cultures that we live in. Without clear systematic evidence on how successful their policies are at enhancing people’s wellbeing, governments risk operating in the ‘dark’…

A growing amount of evidence suggests satisfaction and happiness are negatively linked with unemployment and inflation (Blanchflower and Oswald 1999, US General Social
Survey; Graham and Pettinato 2000, Latinbarometer; Di Tella et al. 2003, Eurobarometer). The effects of unemployment on happiness are stronger than those of inflation (Di Tella et al. 2001); one consequence is that the ‘misery index’, which weights inflation and unemployment equally, may be underestimating the effects of unemployment on wellbeing. Moreover, unemployment appears to affect long-term levels of life satisfaction, even once an individual becomes re-employed (Lucas et al. 2004), in part because of the associated stigma (Graham 2007). In addition, life satisfaction has been linked with good governance, social and community networks, and trust (Helliwell 2002, World Values Survey). Frey and Stutzer (1999) find that greater levels of direct democracy result in more happiness. In Biswas-Diener and Diener’s (2006) findings of the satisfaction of pavement dwellers in Calcutta derived from their social relationships suggest that both material and social needs may matter equally for wellbeing. In practice, this might caution against a housing strategy that would disperse communities, as has often occurred in slum resettlement projects in India and elsewhere.

In sum, despite numerous well-founded reasons to avoid adopting psychological/subjective values as policy goals, work that assesses reactions to particular policies might make a pertinent contribution to policymaking.

6. CONCLUSION

This paper has proposed collecting data to derive seven indicators of psychological wellbeing (namely, the presence of meaning, and relatedness, autonomy and competence), life satisfaction (global and domain-specific), and happiness. We have argued that exploring the relationship between these indicators, and also with the ‘objective’ criteria

typically available in national surveys and their evolution over time, could significantly complement the content and process of anti-poverty policy making.

We do not propose these indicators because we believe policy should be designed around them. At the same time, we feel strongly that these indicators capture something important about why people feel and act as they do, and that better elucidating the extent to which people perceive their wellbeing positively, and how these perceptions change between countries, over time, and in relation to objective measures would fill an important gap in our understanding of capability poverty.
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Appendix 1: Complete shortlist

PSYCHOLOGICAL WELLBEING

MEANING IN LIFE

Please take a moment to think about what makes your life feel important to you. Please respond to the following statements as truthfully and accurately as you can, and also please remember that these are very subjective questions and that there are no right or wrong answers. Please answer according to the scale below.

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Not at all</td>
<td>Not very true</td>
<td>Somewhat true</td>
<td>Completely true</td>
<td></td>
</tr>
</tbody>
</table>

**STATEMENT** | **SCORE**
--- | ---
My life has a clear sense of purpose | 
I have a good sense of what makes my life meaningful | 
I have discovered a satisfying life purpose | 

SOURCE: Short-form of Steger questionnaire for presence of Meaning in Life (Steger et al. 2006). He combines sub-scales to measure the presence of meaning and search for meaning. A short-form of the ‘presence’ subscale only is used here.

If the answer to this question is 3 or 4 => What makes your life meaningful?

BASIC PSYCHOLOGICAL NEEDS

Please read each of the following items carefully, thinking about how it relates to your life, and then indicate how true it is for you. Use the following scale to respond:

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Not at all</td>
<td>Not very true</td>
<td>Somewhat true</td>
<td>Completely true</td>
<td></td>
</tr>
</tbody>
</table>

A) AUTONOMY

**STATEMENT** | **SCORE**
--- | ---
I feel like I am free to decide for myself how to live my life. | 
I generally feel free to express my ideas and opinions | 
I feel like I can pretty much be myself in daily situations | 

B) COMPETENCE

**STATEMENT** | **SCORE**
--- | ---
People I know tell me I am competent at what I do. | 
Most days I feel a sense of accomplishment from what I do. | 
I often feel very capable. | 

C) RELATEDNESS

**STATEMENT** | **SCORE**
--- | ---
I get along well with people I come into contact with. | 
I consider the people I regularly interact with to be my friends. | 
People in my life care about me. | 

Source: Short-form of Ryan and Deci Basic Psychological Needs scales. (Ryan and Deci 2000, 2001)

---

39 The meaning of this question (for translation) is to act in harmony with who one is.
SUBJECTIVE WELLBEING

LIFE SATISFACTION

Overall, how satisfied are you with your life overall/(domain)? Are you…

1 Very satisfied
2 Fairly satisfied
3 Not very satisfied
4 Not at all satisfied

<table>
<thead>
<tr>
<th>Domain</th>
<th>Specific item(s)</th>
<th>Satisfaction level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Life Satisfaction overall⁴⁰</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Material wellbeing</td>
<td>Food</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Housing</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Income</td>
<td></td>
</tr>
<tr>
<td>Health</td>
<td>Health</td>
<td></td>
</tr>
<tr>
<td>Productivity</td>
<td>Work</td>
<td></td>
</tr>
<tr>
<td>Security</td>
<td>Physical safety</td>
<td></td>
</tr>
<tr>
<td>Intimacy</td>
<td>Friends &amp; family</td>
<td></td>
</tr>
<tr>
<td>Community</td>
<td>Education</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Neighborhood</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Ability to help others</td>
<td></td>
</tr>
<tr>
<td>Religion/spiritual wellbeing</td>
<td>Wellbeing from spiritual, religious or philosophical beliefs</td>
<td></td>
</tr>
</tbody>
</table>

The domains used are adapted from The International Wellbeing Group (2006) Personal Wellbeing Index. The 4-scale measure is feasible for enumerator-administered questionnaires in developing countries.


HAPPINESS

Taking all things together, would you say you are:

1 Very happy
2 Rather happy
3 Not very happy
4 Not at all happy

Key reference:
World database of happiness,

⁴⁰“How satisfied are you with your life as a whole?”
### Appendix 2: Domains and items covered in various household surveys on perceived satisfaction/happiness

<table>
<thead>
<tr>
<th>Domain</th>
<th>Item</th>
<th>US General Social survey</th>
<th>German socio-economic panel</th>
<th>British panel survey</th>
<th>European social survey</th>
<th>European quality of life survey</th>
<th>World Values survey</th>
</tr>
</thead>
<tbody>
<tr>
<td>Material wellbeing</td>
<td>Standard of living</td>
<td></td>
<td></td>
<td>x</td>
<td>x</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Financial situation</td>
<td>x</td>
<td></td>
<td></td>
<td>x</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Housing</td>
<td>x</td>
<td>x</td>
<td></td>
<td>x</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Personal income</td>
<td>x</td>
<td>x</td>
<td></td>
<td>x</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Health</td>
<td>Health</td>
<td></td>
<td></td>
<td></td>
<td>x</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Productivity</td>
<td>Work (housework)</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td></td>
</tr>
<tr>
<td>Security</td>
<td>Social security</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>x</td>
</tr>
<tr>
<td>Intimacy</td>
<td>Family life</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td></td>
<td>Friends</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Husband/wife/partner</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>x</td>
</tr>
<tr>
<td>Community</td>
<td>Social life</td>
<td>x</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>x</td>
</tr>
<tr>
<td></td>
<td>Education</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Voluntary work</td>
<td>x</td>
<td></td>
<td>x</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Spirituality/Religion</td>
<td>Religion</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other</td>
<td>Free time</td>
<td>x</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Life so far</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Politics</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Work-life balance</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Leisure time</td>
<td></td>
<td></td>
<td></td>
<td>x</td>
<td>x</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Child care</td>
<td>x</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Appendix 3: Long form of questionnaires included in paper in modified form

1. STEGER’s MEANING IN LIFE SCALE

MLQ Please take a moment to think about what makes your life feel important to you. Please respond to the following statements as truthfully and accurately as you can, and also please remember that these are very subjective questions and that there are no right or wrong answers. Please answer according to the scale below:

<table>
<thead>
<tr>
<th>Absolutely Untrue</th>
<th>Mostly Untrue</th>
<th>Somewhat Untrue</th>
<th>Can’t Say</th>
<th>Somewhat True</th>
<th>Mostly True</th>
<th>Absolutely True</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
</tbody>
</table>

1. ____ I understand my life’s meaning.
2. ____ I am looking for something that makes my life feel meaningful.
3. ____ I am always looking to find my life’s purpose.
4. ____ My life has a clear sense of purpose.
5. ____ I have a good sense of what makes my life meaningful.
6. ____ I have discovered a satisfying life purpose.
7. ____ I am always searching for something that makes my life feel significant.
8. ____ I am seeking a purpose or mission for my life.
9. ____ My life has no clear purpose.
10. ____ I am searching for meaning in my life.

MLQ syntax to create Presence and Search subscales:
Presence = 1, 4, 5, 6, & 9-reverse-coded
Search = 2, 3, 7, 8, & 10

Source: Steger et al. (2006).

2. DECI AND RYAN’S BASIC NEED SATISFACTION (GENERAL) SCALE

Please read each of the following items carefully, thinking about how it relates to your life, and then indicate how true it is for you. Use the following scale to respond:

<table>
<thead>
<tr>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
</tr>
</thead>
<tbody>
<tr>
<td>not at all true</td>
<td>somewhat true</td>
<td>very true</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

1. I feel like I am free to decide for myself how to live my life.
2. I really like the people I interact with.
3. Often, I do not feel very competent.
4. I feel pressured in my life.
5. People I know tell me I am good at what I do.
6. I get along with people I come into contact with.
7. I pretty much keep to myself and don’t have a lot of social contacts.
8. I generally feel free to express my ideas and opinions.
9. I consider the people I regularly interact with to be my friends.
10. I have been able to learn interesting new skills recently.
11. In my daily life, I frequently have to do what I am told.
12. People in my life care about me.
13. Most days I feel a sense of accomplishment from what I do.
14. People I interact with on a daily basis tend to take my feelings into consideration.
15. In my life I do not get much of a chance to show how capable I am.
16. There are not many people that I am close to.
17. I feel like I can pretty much be myself in my daily situations.
18. The people I interact with regularly do not seem to like me much.
19. I often do not feel very capable.
20. There is not much opportunity for me to decide for myself how to do things in my daily life.
21. People are generally pretty friendly towards me.

Scoring information. Form three subscale scores, one for the degree to which the person experiences satisfaction of each of the three needs. To do that, you must first reverse score all items that are worded in a negative way (i.e., the items shown below with (R) following the items number). To reverse score an item, simply subtract the item response from 8. Thus, for example, a 2 would be converted to a 6. Once you have reverse scored the items, simply average the items on the relevant subscale. They are:

Autonomy: 1, 4(R), 8, 11(R), 14, 17, 20(R)

Competence: 3(R), 5, 10, 13, 15(R), 19(R)

Relatedness: 2, 6, 7(R), 9, 12, 16(R), 18(R), 21

Source: Ryan and Deci (http://www.psych.rochester.edu/SDT/measures/index.html).
3. **CUMMINS: SATISFACTION WITH LIFE AS A WHOLE AND PWI SCALE** (written form)

The following questions ask how **satisfied** you feel, on a scale from zero to 10. **Zero** means you feel completely dissatisfied. **10** means you feel completely satisfied. And the **middle of the scale is 5**, which means you feel neutral, neither satisfied nor dissatisfied.”

**Part 1 [Optional Item]**

1. “Thinking about your own life and personal circumstances, how satisfied are you **with your life as a whole ?**”

<table>
<thead>
<tr>
<th>Completely Dissatisfied</th>
<th>Neutral</th>
<th>Completely Satisfied</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>1 2 3 4</td>
<td>5 6 7 8 9 10</td>
</tr>
</tbody>
</table>

**Part 2**

1. “How satisfied are you **with your standard of living ?**”

<table>
<thead>
<tr>
<th>Completely Dissatisfied</th>
<th>Neutral</th>
<th>Completely Satisfied</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>1 2 3 4</td>
<td>5 6 7 8 9 10</td>
</tr>
</tbody>
</table>

2. “How satisfied are you **with your health ?**”

<table>
<thead>
<tr>
<th>Completely Dissatisfied</th>
<th>Neutral</th>
<th>Completely Satisfied</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>1 2 3 4</td>
<td>5 6 7 8 9 10</td>
</tr>
</tbody>
</table>

3. “How satisfied are you **with what you are achieving in life ?**”

<table>
<thead>
<tr>
<th>Completely Dissatisfied</th>
<th>Neutral</th>
<th>Completely Satisfied</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>1 2 3 4</td>
<td>5 6 7 8 9 10</td>
</tr>
</tbody>
</table>
4. “How satisfied are you with your personal relationships?”

5. “How satisfied are you with how safe you feel?”

6. “How satisfied are you with feeling part of your community?”

7. “How satisfied are you with your future security?”

8. “How satisfied are you with your spirituality or religion?”

Appendix 4: Questionnaires not used in paper

1. Diener: Satisfaction with Life Scale

The SWLS is a short, 5-item instrument designed to measure global cognitive judgments of one's lives. The scale usually requires only about one minute of respondent time. The scale is not copyrighted, and can be used without charge and without permission by all professionals (researchers and practitioners). The scale takes about one minute to complete, and is in the public domain. A description of psychometric properties of the scale can be found in Pavot and Diener, 1993 Psychological Assessment.

**Survey Form**

Below are five statements that you may agree or disagree with. Using the 1 - 7 scale below indicate your agreement with each item by placing the appropriate number on the line preceding that item. Please be open and honest in your responding.

- 7 - Strongly agree
- 6 - Agree
- 5 - Slightly agree
- 4 - Neither agree nor disagree
- 3 - Slightly disagree
- 2 - Disagree
- 1 - Strongly disagree

____ In most ways my life is close to my ideal.

____ The conditions of my life are excellent.

____ I am satisfied with my life.

____ So far I have gotten the important things I want in life.

____ If I could live my life over, I would change almost nothing.

- 35 - 31 Extremely satisfied
- 26 - 30 Satisfied
- 21 - 25 Slightly satisfied
- 20 Neutral
- 15 - 19 Slightly dissatisfied
- 10 - 14 Dissatisfied
- 5 - 9 Extremely dissatisfied

Source: Diener (1985).
2. Life Meaning from Rahe’s Brief Stress and Coping Inventory

Answers: 0 = no, 1 = sometimes, 2 = frequently

I feel my life is part of a larger plan
My life has no direction and meaning (reverse coded)
Many things in life give me great joy
I am able to forgive myself and others
I doubt that my life makes a difference (reverse coded)
My values and beliefs guide me daily
I feel in tune with people around me
I am at peace with my place in life