วารสารเศรษฐศาสตร์ธรรมศาสตร์ Thammasat Economic Journal
ปีที่ 26 ฉบับที่ 2 มิถุนายน 2551 Vol.26, No.2, June 2008

Increasing population happiness through the distribution of resources

Robert A. Cummins[*]

Abstract

This paper concerns the ways in which public policy regarding the distribution of resources might be used to increase the happiness of the Thai population. The term happiness refers to the subjective side of life quality, which in contemporary science is more commonly referred to as subjective wellbeing (SWB). The SWB construct is described within the theoretical context of SWB homeostasis. This is a proposed management system which has the role of maintaining a positive view of the self. It will be described how the homeostatic system can be challenged by hardship. The resources that the system requires to manage such challenges will also be described. Recommended forms of SWB measurement will be considered. It is concluded that public policy which directs resources to disadvantaged population sectors may be one of the most effective initiatives to enhance population wellbeing and national productivity.

Introduction

Across the globe, governments and the international organizations that inform them, are taking an interest in population happiness. It was not always so. The name of the Organization for

[*] Professor at School of Psychology, Deakin University, Melbourne, Australia.

Economic Cooperation and Development says it all. The overriding concern of nations has been with their economic and physical development. But now this attitude is changing. Led by the example of the tiny Kingdom of Bhutan, policy makers have come to realize that, while economic development is important, so too is the happiness of citizens. A contented populace is advantaged in many ways over one that is not. Happy citizens create more social capital, work harder, are healthier, and are more self-sufficient (for a review of the advantages that happiness bestows see Lyubomirsky, King, and Diener (2005). In order to consider these new developments, in April 2007 the OECD convened an international conference titled 'Is happiness measurable and what do those measures mean for policy?' (Griffoin 2007). Other august financial institutions are showing a similar level of interest. In January of this year Hoornweg, Ruiz Nunez, Freire, Palugyai, Villaveces, Herrera (2007) produced a report for the World Bank entitled "City Indicators: Now to Nanjing" which recommends, inter alia, using the Personal Wellbeing Index to measure happiness.

National governments are also showing an interest in population happiness and the Royal Thai Government, through the Public Policy Development Office, is at the forefront of this new advance. In 2006 the PPDO organized an international workshop to discuss Bhutan's Gross National Happiness development framework as compared with Thailand's similar concept of Sufficiency Economy. This current conference on Happiness and Public Policy testifies to the continuing interest of the PPDO in understanding and fostering this new area for public good.

Governments are realizing that the promotion of happiness among their citizens is important from both a humanitarian and a productivity viewpoint. Their interest is also fuelled by concern at the transition towards a 'grey' age structure for most countries. This raises the future problem of providing sufficient social and economic support to an aging population. So results such as those from China (Wu & Schimmele 2006), showing that happiness among elderly people is associated with better health, are becoming clearly relevant to policy makers.

Across the world governments are following a similar trend. The UK Government's Sustainable Development Strategy, 'Securing the Future', commits the Government to get a better

understanding and focus on well-being and happiness (Dolan, Peasgood & White 2006). The Canadian International Development Agency (2005) has now sponsored two international conferences on Gross National Happiness. While the Government of Malaysia, through its Ministry of Women, Family and Community Development (2007), is committed to strengthening and promotion of family well-being.

But what is the intended meaning behind such words as happiness, life quality and well being? Just how these constructs operationalised and measured will now be considered.

The historical context

Subjective Wellbeing (SWB) has been a topic of scientific study for over 30 years. The area was launched into scientific prominence by the publications of Andrews and Withey (1976) and Campbell, Converse, and Rodgers (1976). Both texts demonstrated that SWB data could be reliably measured and that the statistical analysis of such data, using ordinary linear statistics, produced interesting results. Of particular importance, they found their measures of SWB to be remarkably stable. It is this stability and reliability of measurement that has made SWB such an attractive new area for quantitative investigation. However, researchers in this area have also encountered many problems in their attempts to create a systematic body of knowledge. Two of the most difficult issues are the problems of measurement and terminology (see Diener 2006 for a review). The problems with terminology have been very serious. Even as the early researchers used the term 'happiness' to describe the area of their study, they recognized that the term was ambiguous. For example, Fordyce (1983) grapples with his use of the term describing 'happiness' as 'an emotional sense of well-being ---- that goes by many names (contentment, fulfillment, self-satisfaction, joy, peace of mind, etc.)'. The problem that Fordyce recognized is that, in common English usage, happiness generally refers to a state of mind that has been caused by an acute experience, such a having a cup of tea on a hot day. But this is not what the wellbeing researchers generally intend to measure. They strive to measure a dispositional state of happiness that is much

more stable. So in order to make this distinction, 'trait' or 'dispositional' happiness has come to be known as SWB in order to reduce terminological confusion.

Measuring SWB in a consistent manner has posed the other major challenge to research cohesion. There are several reasons for this. The first is that, in the presence of terminological confusion, opinions vary as to what should be measured. The second is that a surprisingly high proportion of researchers find it necessary to invent their own scale. The result is a huge legacy of instruments. The Australian Centre on Quality of Life (ACQOL 2007) lists many hundreds of scales that purport to measure SWB in one form or another. This has greatly limited progress in understanding SWB since these scales are of very mixed psychometric quality and many of them measure quite different constructs. The unfortunate result is a confused and massive literature that, despite three decades of research, still lacks simple conceptual cohesion.

No doubt these difficulties have contributed to the limited acceptance among policy makers in adopting SWB as a guide to life quality. Still much preferred, are the traditional quality of life measures, with their focus on the objective circumstances of living. These variables are more tangible. They can be simultaneously observed by a number of people, usually as estimates of frequencies or quantities. Common examples are wealth or the presence of medical disability. However, despite the difficulties of conceptualization and measurement, SWB is gaining prominence as an interesting new facet of the human condition. After all, if people feel that their lives are not worth living, what is the use of life (see Schalock 1997). And a fundamental truth is that the objective measures of wealth and health cannot be used as proxy measures of SWB. For example, there is generally a low correlation between objectively measured physical health and SWB (Cummins et al. 2006) provided that the people concerned have the resources to deal with the consequences of their poor health for daily living.

So the new understanding is that 'Quality of life' is a dual construct, comprising both the familiar objective dimension and another subjective dimension that is more challenging to measure and understand. Moreover, these two forms of measurement are usually quite independent of one another. We propose that the reason for this independence is that SWB is

being managed by a psychological system that we call SWB homeostasis (see Cummins 2003; Cummins, Gullone & Lau 2002).

Homeostasis involves various mechanisms. Some of these are dispositional and include processes of adaptation, selective-attention, and social comparison. Some of them are resources external to the person, such as money and close relationships, that can be used to shield the person from adversity. These various devices act in concert to maintain the average level of SWB at around 75 percentage of the measurement scale maximum in Western nations (Cummins et al. 2003). That is, when SWB scores are standardized to a 0-100 scale (completely dissatisfied – completely satisfied) people in Australia, on average, feel 75 percent satisfied with their lives. However, this value differs between nations for reasons that will be discussed later.

So, the totality of life quality must be measured in two dimensions. The objective and the subjective measures provide important and different views. Which view is most relevant to policy makers will depend, to some extent, on the population concerned. In the context of North America, authors such as Schalock (1997) consider it is how people feel about their life quality that is the ultimate test of a life worth living. And certainly in circumstances where basic material needs are met, as is most common within that society, authors generally agree that life quality can be most meaningfully assessed by subjective variables (e.g. Cummins 2000a; Headey 1981; Spilker 1990). However, in countries such as Thailand, where it is more common for people to lack the physical resources that they need for normal life quality, measuring their objective circumstances is also crucial to understanding the relative areas of need. Importantly, when the objective circumstances of living are very tough, they defeat the capacity of the homeostatic system and SWB falls below its normal levels. When this occurs, SWB people are at high risk of depression and their functioning is severely impaired. So, understanding the relationship between the objective circumstances of living and SWB management is important from a public health perspective. This understanding is assisted by the theory of SWB homeostasis.

Subjective Wellbeing Homeostasis

The theory of Subjective Wellbeing Homeostasis proposes that, in a manner analogous to the homeostatic maintenance of body temperature, subjective wellbeing is actively controlled and maintained (see Cummins & Nistico 2002, for an extended description). SWB homeostasis is attempting to maintain a normal positive sense of wellbeing that is a generalized and rather abstract view of the self. It is exemplified by a response to the classic question "How satisfied are you with your life as a whole?" Given the extraordinary generality of this question, the response that people give does not represent a cognitive evaluation of their life. Rather it reflects a deep and stable positive mood state that we call Core Affect (Davern, Cummins & Stokes 2007). This is a mood state that is dominated by a sense of contentment flavored with a touch of happiness and excitement. It is this general and abstract state of subjective wellbeing which the homeostatic system seeks to defend. As one consequence, the level of satisfaction people record to this question has the following characteristics:

1. It is normally very stable. While unusually good or bad events will cause it to change in the short term, over a period of time homeostasis will normally return SWB to its previous level (see Hanestad & Albrektsen 1992; Headey & Wearing 1989).

2. Each person has a level of Core Affect that is set genetically. This 'set-point' for SWB lies in the 'satisfied' sector of the dissatisfied-satisfied continuum. That is, on a scale where zero represents complete dissatisfaction with life and 100 represents complete satisfaction, people's set-point normally lies within the range of about 60 – 90 points (see Cummins, Gullone & Lau 2002).

3. At a population level within Western nations, the average set-point is 75. In other words, on average, people feel that their general satisfaction with life is about three-quarters of its maximum extent (Cummins 1995, 1998).

While this generalized sense of wellbeing is held positive with remarkable tenacity, it is not immutable. A sufficiently adverse environment can defeat the homeostatic system and, when this occurs, the level of subjective wellbeing falls below its homeostatic range. For example,

people who experience strong, chronic pain from arthritis or from the stress of caring for a severely disabled family member at home have low levels of subjective wellbeing (Cummins 2001). However, for people who are maintaining a normally functioning homeostatic system, their levels of SWB will show little relationship to normal variations in their chronic circumstances of living.

So, how does homeostasis manage to defend SWB against the unusually good and the unusually bad experiences of life? The answer we propose is that there are two levels of defense and we call these defensive systems 'buffers'. One set of buffers is external to the person and the other internal.

Homeostatic buffers

Interaction with the environment constantly threatens to move wellbeing up or down in sympathy with momentary positive and negative experience. And to some extent this does occur. However, most people are adept at avoiding strong challenges through the maintenance of established life routines that make their daily experiences predictable and manageable. Under such ordinary life conditions, the level of the mood-state varies by perhaps 10 percentage points or so from one moment to the next, and this is the Set-Point Range. Homeostasis works hardest at the edges of this range to prevent more drastic mood changes which, of course, also occur from time to time. Strong and unexpected positive or negative experience will shift the sense of personal wellbeing to abnormally higher or lower values, usually for a brief period, until adaptation occurs. However, if the negative experience is sufficiently strong and sustained, homeostasis will lack the power to restore equilibrium and SWB will remain below its set-point range. Such homeostatic defeat is marked by a sustained loss of positive mood and a high risk of depression.

So the first line of defense for homeostasis is to avoid, or at least rapidly attenuate, negative environmental interactions. This is the role of the external buffers.

External buffers

The two most important sources for the defence of our SWB are close relationships and money. Of these two, the most powerful buffer is a relationship with another human being that involves mutual sharing of intimacies and support (Cummins, Walter & Woerner 2007, Report 16.1). Almost universally, the research literature attests to the power of such relationships to moderate the influence of potential stressors on SWB (for reviews see Henderson 1977; Sarason, Sarason & Pierce 1990).

Money is also a very important external buffer, but there are misconceptions as to what money can and cannot do in relation to personal wellbeing. For example, it cannot shift the set-point to create a perpetually happier person. Set-points for SWB are proposed to be under genetic control (Braungart et al. 1992; Lykken & Tellegen 1996), so in this sense money cannot buy happiness. No matter how rich someone is, their average level of SWB cannot be sustained higher than one that approximates the top of their set-point range. People adapt readily to luxurious living standards, so genetics trumps wealth after a certain level of income has been achieved. While this opinion flies in the face of those Positive Psychologists who believe that people can be made endlessly happier, it is support by the findings of a recent report. Cummins et al., (2007) studied the cumulative data from the Australian Unity Wellbeing Index which comprises SWB data from about 30,000 Australians. The purpose of the analysis was to determine the demographic groups with the highest and the lowest wellbeing. It is reported that the maximum average subgroup score is 81.0 points. Thus, this seems to be the maximum SWB that can be maintained as a group average even for people who have close relationships and plenty of money.

The true power of wealth is to protect wellbeing through its capacity to be used as a highly flexible resource (Cummins 2000b) that allows people to defend themselves against the negative potential inherent within their environment. Wealthy people pay others to perform tasks they do not wish to do themselves. Poor people, who lack such resources, must fend for themselves to a much greater extent. Poor people, therefore, have a level of SWB that is far more at the mercy of their environment.

Internal buffers

When we fail to control our external environment and SWB is threatened, our internal buffers come into play. These comprise protective cognitive devices that are designed to minimize the impact of personal failure on our positive feelings about our self. There are many such devices, collectively called Secondary Control techniques (Rothbaum, Weisz & Snyder 1982) and a detailed discussion of these systems in relation to SWB is provided in Cummins and Nistico (2002) and Cummins, et al., (2002).They have the role of protecting our SWB against the conscious reality of life. They do this by altering the way we see ourselves in relation to some challenging agent, such that the negative potential in the challenge is deflected away from the core view of self. So the role of these buffers is mainly to minimize the impact of personal failure. The ways of thinking that can achieve this are highly varied. For example, one can find meaning in the event ('God is testing me'), fail to take responsibility for the failure ('it was not my fault') or regard the failure [dropping a vase] as unimportant ('I did not need that old vase anyway').

In summary, the combined external and internal buffers ensure that our wellbeing is robustly defended. There is, therefore, considerable stability in the SWB of populations and, as has been stated, the mean for Western societies like Australia are consistently at about 75 points on a 0 to 100 scale. However, comparisons of SWB between countries are complicated by two forces. One is living standards that are severe enough to cause wide-spread homeostatic defeat. The other is a cultural response bias in the way that people project their SWB onto measurement scales.

Cross-cultural differences

Within the Western media is common to find reports that present comparative lists of SWB or happiness between countries. Inevitably the authors assume that the measures they are reporting are valid between cultures such that the differences represent meaningful international comparisons of life quality. This assumption is incorrect and simplistic. There are two reasons. The first is the simple problem of translation – that there is often no simple equivalence between

the terms used to describe affective states in different languages. The second reason is more important and concerns cultural response bias. Such bias has been well documented (e.g. Lee et al. 2002; Stening & Everett 1984) and shows that when data are compared between equivalent demographic groups, people from East and South East Asian cultures are more reticent to rate themselves at the ends of the response scale when compared to people from countries like Australia. The reasons for this, as documented by Lau, Cummins and McPherson (2005) in Hong Kong, are a combination of modesty, concern at tempting the fates by rating oneself too high, and having a different view of what the maximum scale score represents. The result of this response bias is to lower the overall average score because more very high scores, which are generally far more common than very low scores, are missing. The operation of this bias then gives the appearance that, on average, the people from these countries have lower levels of SWB than do people from Western countries. While this may indeed be the case, due to differential living standards, the simple comparison is contaminated by response bias.

Response bias and living standards

The initial report that combined population mean scores to produce a 'Gold Standard' for SWB (Cummins 1995), used data only from Western countries. When non-Western countries were included (Cummins 1998) it became evident that this combination produced far higher variation in SWB. This is hardly surprising. Countries differ in both wealth and culture, and SWB is sensitive to both types of influence. Figure 2 shows the relationship between national wealth and SWB.

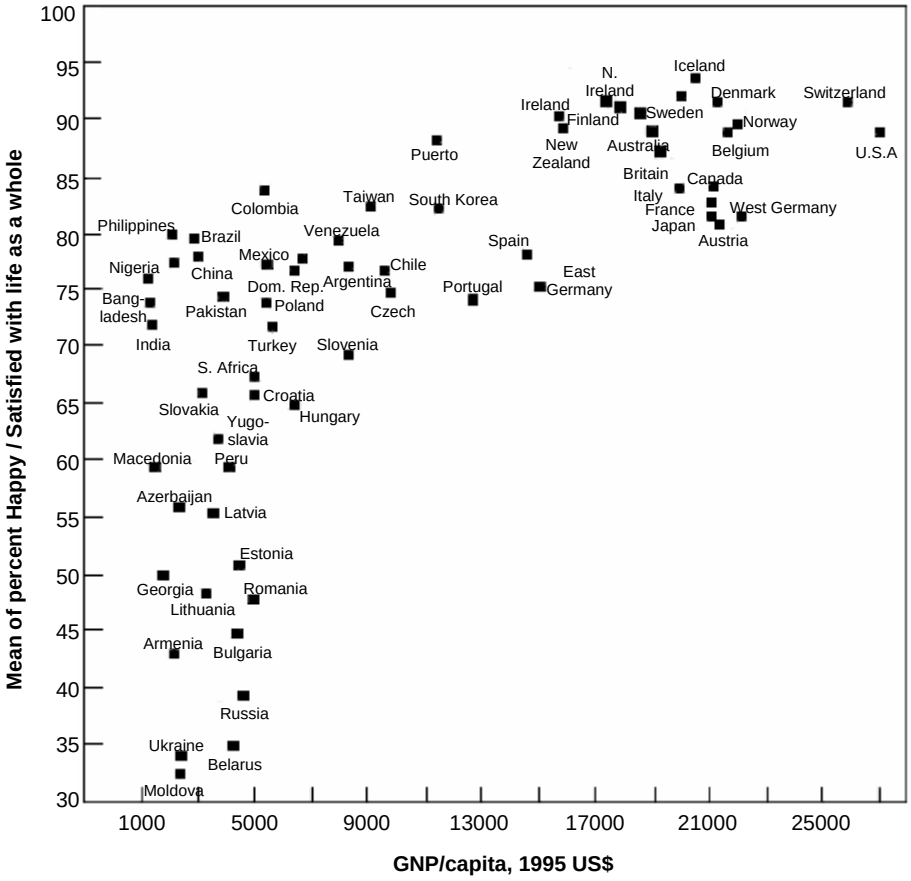

Figure 1. The relationship between SWB and GNP by country

This Figure (World Bank 1997) shows Subjective Wellbeing plotted against the level of economic development. To measure SWB these researchers used the 4-point response scale of: Very happy, Quite happy, Not very happy, Not at all happy. The following can be noted:

(a) While there is a strong overall relationship between national wealth and SWB, this relationship is clearly not linear.

(b) The countries with incomes <$5,000 vary widely in SWB and yet there is no simple relationship between their SWB and wealth. This indicates that population SWB can be heavily influenced by many other factors such as civil disturbance,

food shortage, disease, bad governance, etc. SWB may also vary according to culture.

The difficulties of dealing with the combination of cultural response bias and lower living standards are demonstrated in the study by Lau et al., (Lau, Cummins & McPherson 2005), who compared the SWB of Hong Kong Chinese and Australians. Apart from differences in the cultural response bias between these two countries, the lowest incomes in Hong Kong are relatively much lower that they are in Australia. This can be seen from the respective Gini Coefficients as Hong Kong 52.5 and Australia 35.2 (United Nations 2006). So the comparative SWB data will reflect both of these two influences as follows:

1. Because people in Hong Kong will be avoiding the ends of the response scale, the cultural response bias will tend to truncate the distribution, making it more leptokurtic. The result will be a smaller standard distribution and a reduced mean score because the effect will be most evident at the top of the distribution.

2. Becaused more people in dHong Kong will be in economic ddistress, this will tend to extend the distribution downwards, making the data more negatively skewed. In turn, this will tend to decrease the mean and raise the standard deviation.

In summary, the mean score should be less in Hong Kong due to the combined influences of the response bias and income inequality. The standard deviation, on the other hand, should remain much the same due to the opposing forces. And this is what was found. The mean SWB was higher for the Australians and there was no difference in the standard deviations of the two samples. We conclude that this is evidence of a cultural response bias because the effects of the income inequality alone would act to both reduce the mean and extend the standard deviation.

What is clear from this account is that the interpretation of international SWB comparisons must be done very cautiously. But of greater interest to many countries is the change in their average SWB over time. Since such within-country comparisons will necessarily hold cultural response bias constant, changes over time will reflect the relative ability of the population to manage their wellbeing and, in particular, the proportion of the population who are suffering

homeostatic failure. So let me now consider the process of measuring SWB in an international context.

Measuring subjective wellbeing

The Directory of Instruments available through the Australian Centre on Quality of Life (ACQOL 2007) lists over 700 scales that purport to measure some aspect of life quality. Most claim to measure wellbeing in some form. So how can a researcher make a choice from such a daunting list? The answer is to know what it is that needs to be measured, and so from the perspective of SWB that has given in this paper there are three scales that I recommend.

The first is one of the oldest. It is the single question 'How satisfied are you with your life as a whole?' (Andrews & Withey 1976). This question perfectly fulfills the criteria for an item measuring SWB to be both personal and abstract. No one can compute the answer to the question in terms of cognition. So it is answered in reference to the ongoing mood state, which normally approximates the set-point core affect (Davern, Cummins & Stokes 2007). The drawback to using this question, however, is that it is a single item. As such it is not as reliable as a multi-item scale, so two alternative scales have been devised.

The first is the most widely used index of SWB, the Satisfaction with Life Scale (Diener et al. 1985). This scale is designed to measure global life satisfaction through five items, each of which involves an overall judgment of life in general. The scores from these items are then summed as a measure of SWB. For a copy of the scale go to http://s.psych.uiuc.edu/~ediener/hottopic/hottopic.html.

The importance of the SWLS is that it represents an expanded version of 'life as a whole'. The items are not designed to give individual insights into the structure of SWB. This differs from the second scale to be recommended. The Personal Wellbeing Index (International Wellbeing Group 2006) has a quite different design as the 'first-level deconstruction' of life as a whole. It contains eight items, referred to as 'domains', where each item represents a broad, semi-abstract area of life. The theoretical basis for the PWI is that the domains together describe the

experience of overall life satisfaction. Empirically they tend to explain about 50 – 60 percent of the variance in 'life as a whole'. The manual is available from (International Wellbeing Group 2006).

The PWI is designed to be a 'work in progress', with the scale evolving as new data show ways for it to be successfully modified. The International Wellbeing Group oversights this evolution and the eighth domain of Spiritual/Religious satisfaction was added to the scale in 2006.

The disadvantage of the PWI over the SWLS is that, because the domains are slightly more specific in their focus, they are also slightly further-away from the mood state of core affect. The advantage of the PWI is that each of the domains carries its own information concerning a broad aspect of life. Because of this, the scale can be analyzed at either the level of individual domains or at the level of a single combined score. A further advantage of the PWI is that there are parallel versions for adults who have a cognitive or intellectual disability, school children and pre-school children (International Wellbeing Group 2006).

Diagnostic ranges

A unique feature of the PWI is the use of data as a diagnostic indicator of homeostatic failure. There are two major ways in which such data can be informative. The first is at the level of individuals and the second is at the level of population groups.

SWB can be individually diagnostic of homeostatic failure because individuals have set-points within the positive range. While people with high levels of wellbeing will have varying cultural biases towards positioning themselves at the top of a range, the cultural bias will not prevent the normal person from responding that they feel positive about their life. However, it is difficult to be more precise concerning the diagnostic meaning of an individual SWB score. In attempting to interpret such scores, there are three factors to be considered. These are the set-point, which lies somewhere in the positive range between 60 and 90 points, the set-point range which extends about 5 points on either side of the set-point, and the chronic negative life

experiences that are challenging homeostatic control. The combination of these forces acts as follows.

1. The set-point for any individual will lie between 60-90 points.
2. Acute variation within the set-point range will extend this normal range to about 55-95 points. Thus, all normal-range scores lie in the positive range of 50-100. Importantly therefore, individual scores below 50 are diagnostic of homeostatic failure and a high risk of depression.

The interpretation of sample mean scores can be done in two ways. The first is similar to that of the individual scores. Sample mean scores will normally lie well above 50 points. The closer that sample means get to 50 points, the greater the proportion of the sample suffering homeostatic defeat. If sample mean scores lie below 50 points then a majority of the people in the groups will be at high risk of depression.

The second method of interpretation is against local normative data. Such norms can be created by using the means scores from multiple population surveys. If these multiple mean scores are used as data, a normative range for mean scores can be calculated as two standard deviations on either side of the grand mean. Then, any subsequent sample mean that falls outside this range can be judged as abnormal.

The use of such normative ranges for sample means can be seen within Report 16.0 of the Australian Unity Wellbeing Index (Cummins et al. 2006). Here the mean scores from16 consecutive surveys are combined to provide normative ranges for the population as a whole. Additional normative ranges are also calculated for demographic groups, such as those determined by gender, age and income. The calculation of such ranges allows the detection of population sub-groups that fall below the national average. This allows the identification of areas within the population who are most in need of additional assistance, and so informs policy decisions concerning the distribution of resources.

Summary

In order to make a comprehensive assessment of life quality within a nation, it is necessary to employ both objective and subjective indicators. Both kinds of measure provide different and useful information for policy planners. The major usefulness of SWB measurement is as an indication of homeostatic failure and risk of depression. It is, thus, a useful measure to identify areas of relative need and also as a way of tracking the effectiveness of Government interventions that involve the allocation of resources. Giving attention to the resources necessary to maintain normative SWB for disadvantaged population sub-groups may be one of the most effective initiatives to enhance population wellbeing and national productivity.

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