

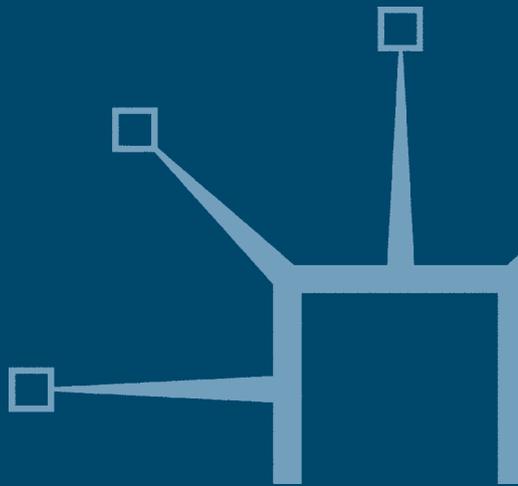
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# Happiness and Public Policy

Theory, Case Studies and Implications

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Edited by  
Yew-Kwang Ng and Lok Sang Ho



# Happiness and Public Policy

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PRINCIPLES OF PUBLIC POLICY PRACTICE

# Happiness and Public Policy

Theory, Case Studies and Implications

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Yew-Kwang Ng  
and  
Lok Sang Ho

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# Foreword

There has been a big surge in interest on the subject of happiness in recent years. Psychologists, sociologists, economists, healthcare professionals, educators, philosophers, as well as religious leaders have all joined in the discussion. This, however, is probably the first volume that addresses specifically the questions of whether and how public policy can contribute to the pursuit of happiness at the individual level.

The contributors in this volume come from a variety of backgrounds. Most of them have participated in an international conference on the subject organized by the Institute of Humanities and Social Sciences of Lingnan University in Hong Kong in the summer of 2005. They are in agreement about the importance of policy makers being reminded of the ultimate objective of their tasks, which is to enhance happiness. A successful policy, therefore, is one that enhances happiness, while a policy that fails to do so cannot really be described as successful.

In recent years quite a number of new books have been published and they have thrown light on the nature of happiness and how one can develop into a happier person. One common idea among these new books is that the pursuit of happiness is a private matter, with attitudes often more important than external factors in determining if a person is happy or not happy. However, the theory and the case studies discussed in this volume suggest that there is still much that public policy can do to facilitate this pursuit.

The volume is not recommending that governments should “do more” to promote happiness. There is no presumption that giving more money for government to spend will automatically enhance happiness, and there are often times that governments should “do less” and not more. It is important, however, that governments should do the right things and enough of the right things, while avoiding doing all the wrong things.

It is hoped that the contributions in this volume will help us tell the right policy from the wrong, and the right set of institutions from the wrong set of institutions.

Yew-Kwang Ng  
Lok Sang Ho  
March 2006

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# 1

## Introduction: Happiness as the Only Ultimate Objective of Public Policy

*Yew-Kwang Ng and Lok Sang Ho*

The title of this volume is *Happiness and Public Policy: Theory, Case Studies, and Implications*. It is motivated by the understanding that public policy should be about enhancing happiness or the welfare of the people, now and in the future. Indeed, if public policy reduces or is neutral with regard to happiness, why do we go through the trouble of designing and implementing all kinds of policies? We have decided to address happiness explicitly in this volume. People sometimes forget about this ultimate objective of public policy, and are misled by distracting guideposts that lead to wrong directions or lead to nowhere.

There is a slight difference in the usage of the concept of happiness and that of welfare. In our view, if we hold the period the same, welfare and happiness are the same thing. We tend to use the term “happy” to refer to current feelings or short-term well-being and use the term “welfare” to refer to longer-term well-being. For the same period (day, week, year, the whole life), if a person is mostly happy over that period without big unhappiness, her welfare over that period must be positive/high. We regard our welfare as our happiness.

We regard the concept of subjective happiness<sup>1</sup> as the right concept for welfare despite difficulties as discussed by Schimmack (Chapter 4) and Coyne & Boettke (Chapter 5). For example, while “people are sometimes willing to forgo pleasure for the pursuit of other goals,” subjective happiness may encompass something more than sensory pleasure; the sacrifice may be made for the sake of future happiness, or the happiness of others. Otherwise, in all likelihood it would be a case of irrational preferences prompted by a lack of self control or misperception, or sheer ignorance.

## **Private happiness but public goal**

Happiness is however a very private matter. If a person honestly says or shows that he is happy no one can say that he is “actually” unhappy. Moreover, one can never try to be happy on behalf of anyone. As Coyne and Boettke (Chapter 5) observed, “there are numerous forces at work that make it extremely difficult, if not impossible, for government to effectively intervene to increase well-being,” with the apparent logical implication that perhaps the best thing for governments to do is just to leave people alone.

The editors agree that very often a policy of leaving people alone is the policy that works best in promoting happiness. But we also agree that there are many things that governments can do, so that individuals go further in the pursuit of happiness on their own.

While happiness is a very private matter, when one is happy or unhappy, usually there are telling signs. And many things that will make someone happy will also make most other people also happy, just as there are many things that will make someone unhappy will also make most people unhappy. There is, therefore, no doubt that there is a lot of commonality among human beings. This is partly because we belong to the same species and partly because we live in the same world, though with significant economic and cultural differences. (More on this below.)

People are worried and feel miserable if their lives or if the lives of their loved ones are in danger: when their jobs are insecure, when they face an uncertain future, when their personal freedoms are restricted, when they are treated unfairly, when they or their loved ones fall ill and cannot get the medical attention needed, etc. A lot of public policy has to do with reducing such worries, reducing the threat of communicable diseases such as SARS, reducing the threat from natural disasters such as Hurricane Katrina that hit New Orleans and caused such huge losses in lives and property, and from crimes through various preventive actions and institutions, increasing the safety of travel by air, by sea, or on the road, reducing the chances of industrial safety, etc.

People are happier if they are better able to pursue their dreams through various enabling measures and institutions. It is in this sense that Amartya Sen (2000) describes development as freedom. When the environment is there, the potential within the human being comes out, and the individual leads a productive, fruitful life. The enabling measures and institutions include such things as a good education, better transportation and communication facilities, protection from

harm through the effective maintenance of law and order, government support of cultural, recreational, and sports programs, a more stable macroeconomic environment without big gyrations in interest rates and exchange rates and with stable prices, and so on. Bridges, Chapter 11, discusses how sports may enhance happiness for an individual or a community, and observed that the situation in Hong Kong still leaves much to be desired in terms of enabling institutions.

People do want to be left alone most of the time, but they may also want to see a helping hand when the occasion arises. Consider the victims from Hurricane Katrina in 2005 or from the tsunami in 2004. They certainly do not want to be left alone. People also want to have an effective tsunami or hurricane warning system, and if possible, they want to have the technology to reduce the destructive power of such natural disasters.

Quite a number of serious disasters are man-made. Consider the Three Mile Island nuclear leak in 1979. Consider the Chernobyl fiasco in 1986. Tighter regulations will not only reduce the chances of such disasters, but also immediately and actually reduce people's fear and anxiety, which are negative emotions tantamount to a reduction of happiness.

Consider Hiroshima and Nagasaki. Consider Vietnam. Consider Iraq. Consider the United Nations and its forerunner the League of Nations, both of which were born out of the exigencies of the World Wars. Institutions that can help obviate the need for wars will enhance happiness.

When people lose their freedom, especially when their freedom has been restricted not by the course of nature but at the hands of someone else, people will become unhappy. By the same token, when autonomy is compromised, especially when such autonomy has been undermined by someone else, particularly someone who uses his authority to impose his will on others, people tend to be unhappy. The entire community would ask: "Who will be the next? Could it be me or my loved ones?" This is why all modern civilized nations have constitutions guaranteeing "basic human rights." To the extent that constitutions protecting basic freedoms and rights are effectively enforced and known to be effectively enforced, people feel more secure and happier.

Thus, although we agree that governments do not have to, and indeed should not, pursue happiness for their citizens, they can facilitate that pursuit by creating an environment that favors such pursuits. Based on the survey results conducted in Hong Kong in 2005 by the

Lingnan Institute for Humanities and Social Sciences, there is little doubt that the rule of law and the basic freedoms that are typically guaranteed in today's democratic nations, such as freedom of the press, freedom of religion, particularly checks against the abuse of power by the police or by agencies of the state, are important contributors to happiness.

### **Altruism and subjective happiness**

Decisions made at the individual or the societal level may be motivated by a concern for the welfare of others but they can be wrong and because of this there is a possibility that "life satisfaction" might diverge from "subjective happiness." When a person has a high valuation of life satisfaction because of her perceived contribution to the happiness of others (through discoveries or other means) and if her own feelings of rewards are insufficient to offset her sufferings (as in the case discussed above), the valuation is correct if and only if others are (and will be) made happier by more than her net sufferings. For example, suppose a regime has successfully persuaded most of the people to make great sacrifices for the welfare of the future generations. The belief of contributing to the welfare of the future will reduce the net sufferings. However, if the net sufferings are still very large and the welfare of the future generations is not really increased significantly, the situation is really very bad even though most people may judge their life as highly satisfying due to the mistaken belief of contributing to the future. This was actually approximately the case during the Great Leap Forward period 1958–1961 in China which proved to be a great leap backward, with many people working very hard in such ventures as backyard furnaces in the belief that they were benefiting their progeny, and more complexly, during the Cultural Revolution 1966–1976, which is essentially a power struggle at the top but which somehow drew hundreds of million of young people into a destructive rampage in the belief that this was good for the country. The situation can only be described as tragic, a case of "bad things done for good intentions."<sup>2</sup> Policy makers must guard against this pitfall. This is why "subjective happiness" is preferred over "life satisfaction" as a concept for policy considerations. Despite the term, "subjective happiness" is more objective than life satisfaction because the former is a direct measure of one's own well-being, while the latter could be more contrived particularly when one has a strong desire to do good.

## Happiness and cultural differences

“Happiness may for some evoke that of a good meal, for others a nice car...” and different individuals may have different “ikigai” (Mathews, Chapter 7; see also similar remarks by Schimmack in Chapter 4). However, this only means that different factors may be important for happiness for different individuals. This need not mean that the concept of happiness and even the feeling of being happy must also be different. In a sense, even for the same person at the same time, the happiness of seeing a beautiful sight and that of listening to good music are qualitatively different (the problem of qualia in philosophy). However, as far as their effects on the happiness of the perceiver is concerned, they can all be compared in terms of their intensity and duration, subject only to practical difficulties of doing so, including imperfect memory. Ignoring any indirect effects on future happiness and the happiness of others, the sum of happiness over time gives a comparable amount of happiness (Ng 1980, Kahneman *et al.* 1997).

The differences between different individuals and between different cultures could also be exaggerated. While we have different cultures, we also have much similar biological needs, and anthropologists readily testify that these are common values shared by different cultures. In addition, the feelings of being happy or unhappy is a biological invention (by either God or evolution) to make flexible species (those that can use its subjective consciousness to make decisions about their behavior rather than those whose actions are all hard-wired through instincts; see Ng 1995, 1996a for a fuller discussion) do things consistent with survival and reproduction.<sup>3</sup> Thus, this feeling has not only an interpersonal, intercultural, and interracial similarity, it must, to some extent, have an interspecies similarity, though the intensity and complexity of the feelings may differ between different affectively sentient species.

## Attitudes, values, and learning

Yet, *depending on the upbringing or the culture*, people may show a huge variation in their psychological response to an apparent deprivation of autonomy. Some may become accustomed to the custom and accept it so much that they do not take it as an infringement to their autonomy. Thus, in China most parents of the generation of the editors follow the “order of parents and the recommendation of match makers” in one of the biggest decisions of life, marriage. Although there were indeed some unhappy marriages, there is little evidence that

there were more unhappy marriages then than there are now, and there were apparently also many happy marriages.

Today of course we will not bring back arranged marriages, at least not as a matter of course. However, it is important to note that the observation from the previous paragraph begs the question: how does upbringing or culture change people's attitudes? Is there a role for governments to play in changing people's attitudes?

Traditionally, economists take peoples' attitudes and values as beyond their scope of study. However, this may be a serious mistake from the point of view of efficient utilization of resources. Many authors, from Kenneth Galbraith and James Duesenberry to Lord Layard, have pointed to the wastefulness of consumption that aims at getting ahead of others (Frank 1999). If getting ahead of others provides utility just because it implies some kind of social recognition or self affirmation, then resources can be better spent if such recognition or self affirmation can be achieved in less wasteful ways. Conspicuous consumption is wasteful because it destroys social recognition or self affirmation while it creates the same for the one who engages in conspicuous consumption. Thus, cultural or educational activities that nurture a sense of self affirmation and provide recognition without competitive conspicuous consumption can be immensely economically productive because they help allow release huge amounts of resources that can be used to address to other needs such as reducing the destructiveness of natural disasters.

When people have come to accept prearranged marriages, they no longer see it as an infringement of their autonomy; they may even see it as their right to follow long-held traditions. The need to identify with one's own people may be so great that if this is that people's tradition, few would want to become an outcast, while some may consider themselves as being spared of the clumsy business of suiting on their own – which is always laden with perils of all sorts. There will, of course, still be some who detest arranged marriages. Should the government come to their defense, and protect their right of choice and autonomy, or should the government leave tradition alone and effectively let parents and perhaps their own community arrange their marriages?

While today most people would enjoy the benefit of having choices, it is often the case that when they face too many choices they may be at a loss to know what to do (Schwartz & Ward 2004). They may become unhappy. They may be confused, bewildered, or simply unable to make up their minds. Not too long ago a young lady in Hong Kong

fell in love with three gentlemen and could not decide which to marry. She committed suicide.

A larger capacity to do things and greater freedom to do things offer people a greater potential to pursue their own dreams. But they do not necessarily make people happier. Happiness requires an ability to manage that capacity and that freedom to the person's advantage. This ability may be called wisdom. Without such wisdom a person could use that capacity and that freedom to hurt himself or others.

Handicapped people have a smaller physical capacity to do things than normal people. One might think that they probably will not be very happy. But there is a young Japanese man by the name of Ootake Hirota who was born with humps rather than limbs. Yet he appears to be very happy, having struggled hard to learn to do many things on his own and has now gained a high degree of independence. He has written several books telling his story, and he has been featured in such magazines as *Asia Weekly* and on televisions. There are many other similar stories, in both western and eastern societies. Clearly attitude or "positive psychology" matters a lot in determining the state of well-being of an individual. An interesting question is: should governments try to nurture a positive psychology in people?

Then there is the story of the Buddhist monk by the name of Bodhidharma who visited China about 100 years before the Tang dynasty in the 6<sup>th</sup> century. He is the first patriarch of Chinese Ch'an (Zen in Japanese) Buddhism. Legend has it that he sat facing the wall meditating for nine years before he started accepting disciples. For most people, facing the wall nine years is unthinkable and a self-inflicted pain, and it may "drive one crazy" literally. But happiness is such a private matter that assuming him to be unhappy will certainly be inappropriate. Again attitude makes the difference.

As important as attitude is in determining whether a person is happy or unhappy, traditionally most economists take attitudes as given and inherent in people. Given this assumption, "inter-personal comparison of utility" was thought to be impossible. Yet the editors have concluded from years of observation and reflections, that despite the apparent diversity in preferences among people, the commonality among human beings is still overwhelming. Human nature is essentially universal: the substantive elements that affect people's state of well-being, such as a sense of being accepted by one's peers, a sense of accomplishment, a sense of freedom from harm, being loved by others and being able to love others, etc., are really not that much different. Differences in attitudes and physical differences in people, and in particular human

capital accumulated through years of training and learning however, have resulted in differences in the ability to transform through the “household production function” various inputs into the outputs that matter to happiness. Thus, even though people may need to consume different things to achieve the substantive elements affecting happiness, it may be inaccurate to describe them as having different “tastes” or “preferences” for objects of desire (Ho 1998).

Values also make a lot of difference. Some people value their own consumption more than that of their family. Some people value the consumption of their family but not the consumption of other families. Some people care about their progeny, while others cannot think beyond their own generation. It is a very controversial matter as to whether governments should get involved in the formation of values, even though in practice almost all governments are indeed involved in some way. The 2001 Patriot Act of the United States stated, among other things, that “the Nation is called upon to recognize the patriotism of fellow citizens from all ethnic, racial, and religious backgrounds.” The American Declaration of Independence states: “We hold these truths to be self-evident, that all men are created equal, that they are endowed by their Creator with certain unalienable Rights, that among these are Life, Liberty and the pursuit of Happiness. – That to secure these rights, Governments are instituted among Men, deriving their just powers from the consent of the governed, – That whenever any Form of Government becomes destructive of these ends, it is the Right of the People to alter or to abolish it, and to institute new Government, laying its foundation on such principles and organizing its powers in such form, as to them shall seem most likely to effect their Safety and Happiness.”

Thus we cannot deny the fact that governments do indeed play an important role in the formation of attitudes and values, and the fact that attitudes and values affect the state of well-being through their effects on resilience and on the goals that they pursue.

Bhutan is reputed to be the only country today that purportedly tries to maximize Gross National Happiness. Stating that the Kingdom of Bhutan tries to maximize GNH rather than GNP or GDP is a strong message on attitudes and values. It is telling its people and the world that Bhutan will not pursue after materialistic ends for its own sake, and that it is aware of happiness being the final goal. The adjustment in attitude that obtains from such a statement may enhance happiness significantly, even though making the statement hardly costs anything.

## Varieties of happiness and the role of policy

It is true that different words may be used even in the same language to describe slightly different concepts akin to happiness, as discussed by Mathews (Chapter 7). It is also true that there are subtle cultural differences in the usage or customary way of using essentially the same concept between different languages. Both of the editors were brought up in Chinese societies and both have received much of their education in English and have used English routinely in their social and professional lives across the globe. We can assure readers that there are no essential differences between the English concept of happiness and the Chinese concept of “kuaile.” True, there are subtle differences between “kuaile” and “kaixin”, and between “kuaile” and “xinfu,” just as there are subtle differences between delight and happiness, and joy and happiness. These differences usually pertain to either the sustainability or duration of the good feelings or the presence or lack of emotional peaks or spikes. For example, delight or *xiyue* in Chinese is more subtle; joy or *huanle* is more like a momentary exhilaration. *Xinfu* is a lasting form of happiness, while happiness is a more generic term to describe good feelings. But despite these subtle differences, the fact remains that we are essentially the same species, *Homo sapiens*. Thus, for such a fundamental concept as the ultimate reward/punishment in the brain, we must have essentially the same concept for its description.

There is much that we can learn to further happiness both at the individual and social levels. For example, considering the many case studies around the world and the observation from many philosophers and analysts, we have now learnt the importance of the adaptation effect and the long-run unimportance of higher consumption after adequate nourishment. This awareness may make people put less emphasis in making more money and put more emphasis on areas more important for happiness like health and relationships. We have also learnt of the mutually offsetting effects of relative competition. This awareness may make people vote to have shorter working weeks and higher taxes to pay for public projects that are more conducive to welfare. We have learnt of the extent of environmental disruption of higher production and consumption. This awareness may make people vote for a president who will sign the Kyoto protocol. Such measures as more environmental protection, shorter working weeks, and higher taxes need not be harmful to individual freedom and need not require very detailed knowledge. Economists tend to view taxes as

distorting given their simple models assuming away many important external effects. However, taking account of the important external effects we have identified, particularly relative competition and environmental disruption, taxes are often more corrective than distorting. While a perfect corrective tax may be difficult to design, some rough taxes on disruption will improve matter significantly. As in the business world, often rules of thumb are practical and useful, even though they are imperfect. Moreover, as shown in Ng (2004), for most cases where some abatement of disruption is desirable, the problem of estimating an efficiency-improving tax may be easily solved. It is desirable to tax disruption (at least) at the marginal cost of abatement (which is easier to estimate than the marginal damage of disruption). Moreover, such a tax will normally yield total revenue in excess of the amount of abatement spending.

Thus there is indeed no need for policy makers to define happiness or to tell people what kind of happiness is good for them and what is not. Governments should just let people define their own happiness and pursue their own dreams (Ho, Chapter 3). But governments can inform people with scientifically proven facts to facilitate informed choice. There is also a lot that public policy can do to take away the sources of unhappiness such as threats from war, disease, hunger, accidents, unemployment, and natural disasters. There is so much that can be done in terms of risk management and social safety net that can enhance people's sense of safety and security. Shi *et al.* (Chapter 8) discovered, for example, that government policy appears to play an important role in enhancing people's confidence over the controllability of SARS during the outbreak of the epidemic. Policies and institutions that are effective in risk management contribute to what Ho calls *ex ante* happiness (Ho, Chapter 3). Gruber and Mullainathan (Chapter 6) also demonstrated that when designed properly, even apparently intrusive policy, such as a steep cigarette tax, could enhance happiness. Also, Ng (Chapter 12) argues that recent results in behavioral economics, happiness studies and beyond imply that the optimal level of public spending is much higher than what most economists believe. Economists typically emphasize the inefficiency of government spending and the excess burden of taxation, ignoring that there may be even grosser inefficiency in private consumption through relative competition and irrational excessive materialism and that, due to factors including environmental disruption of most production and consumption and the negative excess burden in the spending side, taxes that finance public spending may be more corrective than distorting. Moreover,

judging from the likes of Enron and Worldcom and Parmalat and other scandals and the Savings and Loans Crisis during the 1980s in America, the waste caused by the private sector through fraud and inefficiency may well be comparable to the waste in the public sector. Instead of arguing for a small government, it appears that we should focus on establishing good governance and accountability for both the public and the private sectors. In any case, public policy has much to contribute in terms of “capacity building,” both at the social level and at the individual level. As to how that capacity is utilized at the individual level, it must be left to the individual. Moreover, what constitutes an optimal size for the government cannot be presumed “small,” whatever that means, but rather, should be assessed carefully through close examination of the relative net benefits of marginal spending in the public sector versus that in the private sector. (Ho, 2001)

### **Quantifiability of happiness**

Bhutan<sup>4</sup> is now the only country that proclaims to maximize Gross National Happiness, as discussed in the chapter by Shrotriyia (Chapter 9). A natural question that emerges is whether this is a meaningful enterprise. As argued above, while there certainly will be skeptics who wonder if this is just a rhetoric intended for political purposes, the proclamation itself can change people’s attitudes, and at least provide a reminder that GDP or GNP is valued not for its own sake but for the happiness that it could bring.

Unlike GDP, there are no market prices or natural indices for the valuation of subjective happiness or GNH. Economists are typically very skeptical about subjective measures like those for happiness and especially if they are based on surveys of self-reports instead of actual actions or choices involving real gains/losses. The very skeptical remarks by Coyne & Boettke (Chapter 5) is only one example. We do not deny that there may be scope to improve the accuracy of happiness measures. In fact, one of us (Ng 1978, 1980, 1996b) has advocated pinning down the level of zero net happiness and the use of an interpersonally comparable measure of happiness to improve accuracy and comparability; more on this below. However, even at its existing rudimentary stage, measures of happiness are fairly reliable, as discussed by Frey and Stutzer (2001, 2002), Ng (2003) and others. Moreover, we emphatically ask skeptical economists to look at their own backyard! The most important economic variable measured is GNP (or GDP; the two differ only by the amount of net factor incomes (such as investment income

or labor income) from overseas, which GNP includes but GDP does not). However, after a century of GNP figures came the PPP adjustment (adjusted for the differences in the purchasing power parity of different currencies) not too long ago. This single adjustment increased the GNP of China by four times and that of India by six times! Happiness measures may also need to be adjusted substantially. However, it is doubtful that it needs to be adjusted by as much as four or six times!

## **Happiness over the ages**

Veenhoven, Chapter 2, a veteran of happiness study with a very high reputation, presents an assessment of changes in happiness over the very long term, including from our ancestors as hunter-gatherers to the agriculture stage. He believes that the change in the quality of life in this huge transition was negative. We wonder why the agriculturists did not choose to go back to being hunter-gatherers, at least for the many instances where this was feasible. Perhaps the less uncertain life of a hunter-gatherer prevented them from doing so. However, we believe that Veenhoven is probably correct in assessing that the level of happiness has increased somewhat in the industrial and post-industrial stages. However, this is probably due more to the advance in knowledge and social and legal institutions than in higher incomes as such (Easterlin 2000; Frey & Stutzer 2001, 2002) Moreover, this does not mean that we cannot increase happiness even further by taking more adequate control of environmental disruption, by offsetting the mutually offsetting effects of relative competition, and other appropriate measures.

Veenhoven advocates the use of happy-life-years, with the happiness index multiplied by the number of years lived. This is an important extension of the traditional measure that does not account for the length of one's life time. This extension will no doubt be recognized and used more widely. We wish to suggest an improvement to this extension. Veenhoven uses a happiness index between 0 and 1 (converted from the original scale from 0 to 10). For such an index, usually the mid point of 0.5 is taken to stand for a (net) happiness level of neutrality (corresponding to the barely passing grade in academic scores), i.e. neither happy nor unhappy, or with the positive amount of happiness roughly offset by the amount of unhappiness. The average scores for most countries fall between 0.6 to 0.8. This means that a score of 0.3 or even 0.45 actually stands for a negative amount of (net) happiness. This interpretation makes sense particularly in the light of the

finding that there is now broad agreement that happiness and depression can be usefully understood as opposite ends of a bipolar valence dimension (Joseph *et al.* 2004). If we have a life of negative happiness (more suffering than enjoyment), we rather have a shorter than a longer life span. Thus, we suggest that the measure of happy-life-years should count only the amount above the neutrality level (usually 0.5 for the scale of 0 to 1). This adjustment will affect comparisons even for cases where a negative happiness level (i.e. with happiness index below 0.5) is not involved. Suppose country A has a happiness index of 0.65 and an average lifespan of 80 years and country B has a happiness index of 0.7 and an average lifespan of 70 years. According to Veenhoven's existing method, country A has a happy-life-years of 52 and country B has one of 49; A appears to be better off than B. With our revised method, A has a score of 12 and B has one of 14; B is actually better off than A! These are not just hypothetically figures and may in fact apply approximately to countries like Japan versus Australia or the U.S.

### **Happiness and success**

It is well known that successful people tend to be happy. But a recent study by Lyubomirsky *et al.* (2005) found that happiness breeds success. The authors examined three classes of evidence – cross-sectional, longitudinal, and experimental. The results reveal that happiness is associated with and precedes numerous successful outcomes, as well as behaviors paralleling success. More importantly, the evidence suggests that positive affect – “the hallmark of well-being” – may be the cause of many of the desirable characteristics, resources, and successes correlated with happiness. It is an important policy question whether such positive affect can be nurtured, and whether the government has a role in nurturing such. Siu *et al.* (Chapter 10), using a self-administered questionnaire survey on 303 employees from 10 companies/organizations in the public and private service sectors in Hong Kong, found that resilience is associated with a greater ability to cope with job pressures and performance. Moreover, it is found that resilience can be acquired, and the authors went on to recommend that employers provide more staff training on resilience in order to enhance happiness among employees, which could in turn enhance the well-being and profit of the organizations. One could extend these results and suggest that the government, by policy and by example, could help nurture resilience among its population.

If success is understood as rising above the crowds, then someone's success necessarily implies others' failures. Such "success" creates momentary happiness but destroys other people's happiness at the same time, and it would not be enduring. On the other hand, if success is understood as "personal growth," in the sense of gradually developing an ability to transcend rather than being obsessed with short-term achievements or frustrations, then success for all becomes possible. Ho (2001) has defined "spiritual happiness" thus:

Spiritual happiness is derived from going through and reflecting upon the ups and downs in life. Spiritual happiness is based on a sensitivity to the joys and sorrows of other human beings and an inner harmony achieved through the resolution of inner conflicts. (p. 27)

Ho's observation is confirmed by recent findings in positive psychology. For example, Kasser and Ryan (1993) and Kasser (2004) found that well-being was negatively associated with a predominance of extrinsic goals such as financial success and positively associated with a predominance of intrinsic life goals such as self-affirmation and self-acceptance. A 2005 survey conducted by the Lingnan Institute for Humanities and Social Sciences obtained similar results for Hong Kong. French and Joseph (1999) found evidence for a positive association between measures of subjective well-being and religiosity. They added however that this association could have been related to a greater sense of purpose in life or self-actualization, and that when these latter effects are controlled for, the former positive association disappears. But if spirituality is understood to refer to living purposefully ("self-actualization") without allowing oneself to be bogged down by obsessions of one sort or another ("transcendence"), and not necessarily practicing any specific religion, then the results are really consistent with the thesis that spirituality enhances happiness.

Given the importance of a positive attitude in people's happiness, and given the destructiveness of competitive consumption and mutually incompatible concepts of success, we believe that resilience and other positive affects should be nurtured from a young age. This means that schools have a crucial role to play. But attitudes and positive affects do not thrive in a vacuum. They have to be nurtured in an environment that practices such values and attitudes. Schools cannot effectively teach values and practices that are contradicted by society at large.<sup>5</sup> If success is understood by society at large as rising above the

crowds, rather than overcoming one's own weaknesses, it will be difficult to nurture those positive affects. If people who wield power are seen to abuse their power, then it will be difficult to nurture attitudes of loving and caring and respect for one another. There is a fine but clear line between a virtuous circle of positive emotions breeding success, and a vicious circle of negative emotions breeding frustrations and anti-social behavior. A public policy that addresses this important subject may well be far more important than a policy that simply aims at enhancing the GDP.

### Notes

- 1 Philosophers call it hedonic but hedonism is usually understood as referring to the indulgence in present and selfish enjoyment without regard to the future/others. This has nothing to do with subjective happiness. Thus we avoid the use of the term "hedonic".
- 2 Many people would dispute the claim that the Cultural Revolution was started with "good intentions." The editors agree that it was essentially a power struggle at the top. Yet there is now little doubt that many young people who were goaded into their destructive rampage did have good intentions.
- 3 This makes the flexible species also "rational" as defined in Ng 1996a which shows that complex niches favor rational species which make the environment more complex, leading to a virtuous cycle that accelerated the rate of evolution, partly explaining the dramatic speed of evolution based mainly on random mutation and natural selection, a speed doubted by creationists.
- 4 King Jigme Singye Wangchuck, true to his mission to enhance happiness for his countrymen, announced he would dethrone himself in the interest of democracy. Story posted on Time Magazine website June 12, 2006.
- 5 In a recent book, Ho (2005) concluded that "The education ladder should be designed to allow sufficient room for developmental purposes at each stage of development while the curriculum should recognize the emotional and psychological needs of the student." "The government has an important role in maintaining a level playing field and in opening channels for upward mobility for law-abiding citizens. This is necessary before civic education can be effective." (pp. 20–1)

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## **Part I**

# **A Historical Overview of the State of Well-Being of Humanity**

# 2

## Quality-of-Life in the Modern Society Measured with Happy Life Years<sup>1</sup>

*Ruut Veenhoven*

### **Introduction**

#### **Contrary views on the quality-of-life in modern society**

The human species has lived for most of its time in simple hunter-gatherer societies. Agrarian societies developed less than 5000 years ago and it is only in the last 200 years that a “modern” industrial society has come into being. Today this industrial society is rapidly transforming into a global information society.

Is this societal evolution a change for the better? There has always been much controversy over this question, and currently the dispute seems more intense than ever, possibly for the reason that we are more aware today that society is of our making and because social change is taking place at an ever increasing rate. One of the issues in this ongoing debate is the quality-of-life in modern society.<sup>2</sup> Progress optimists believe that life is getting better, while pessimists argue that life is getting worse.

#### **The positive view**

The idea that life is getting better draws on several achievements of modern society. One is the unprecedented rise in the material standard of living; the average citizen lives more comfortably now than kings did a few centuries ago. Another improvement that strikes the eye is that the chance of an untimely death is greatly reduced; ever fewer people die in accidents and epidemics and fewer are murdered. A number of social evils have been abated, such as poverty, inequality, ignorance and oppression. A recent statement of this view can be found in “Its getting better all the time” by Moore and Simon (2000).

This notion of improvement is typically part of an evolutionary view, in which society is seen as a human tool that is gradually perfected. This idea developed during the period of Enlightenment in the 18<sup>th</sup> century and lives on today. The idea that we can improve society by “social engineering” is part of this belief and it forms the ideological basis of major contemporary institutions, such as the welfare state and development aid organizations.

The idea that life is getting better breaks with the traditional religious view of earthly life as a phase of penance awaiting paradise in the afterlife. It is deemed possible to reduce suffering by creating a better world and societal development is seen to head in that way, be it with some ups and downs.

### **The negative view**

The view that life is getting worse is typically fueled by concern about contemporary social problems. One kind of problem is deviant behavior, such as criminality, drug use and school refusal. Another group of problems seen to reduce the quality of life is social conflicts, such as labor disputes, ethnic troubles and political terrorism. The decline of the influence of the church, the family and the local community are also seen to impoverish the quality of life of modern people, as are the rising divorce rates. A recent statement of this view can be found in: “The progress paradox: How life gets better while people feel worse” by Easterbrook (2003).

This notion of decay is often part of the idea of society drifting away from human nature because society has changed a lot, while human nature has not. In this view society is not a piece of equipment, but rather an uncontrollable force that presses humans into a way of life that does not really fit them. The notion of decay fits also with the supposition that there is great wisdom and morality in tradition, which modernization destroys.

The idea that life is getting worse fits a long tradition of social criticism and apocalyptic prophecies. In this view, paradise is lost and is unlikely to be restored.

### **Dominance of the negative view**

The negative view prevails in most discussions and, in particular, in social scientific discourse. This appears both in classic theory and in social reporting, and the negative view has also gained the upper hand in public opinion.

*Themes in classic social theory*

Many renowned social theorists were typically not very positive about the quality-of-life in modern society. For instance, Karl Marx (1871) prophesied that the blind forces of capitalism would result in a process of “Verelendung” (miseryisation), the working class getting ever poorer and becoming even larger. In this line Braverman (1974) argued that mechanization and specialization “degraded” work in the 20<sup>th</sup> century.

Sociologist Emile Durkheim (1897) was also not very positive and observed growing moral disorientation, which he called “anomie.” In his view, the modernization process disrupts the communal basis of morality, amongst other things because social control is reduced, and he provided evidence that this development had boosted suicide rates. Many later sociologists, who also see increasing loneliness and feelings of meaninglessness in modern society, echo this view. Appealing books written in this tradition include Riesman’s (1950) “Lonely crowd,” Ritzer’s (1993) “The McDonaldization of society” and Putnam’s (2000) “Bowling alone.” Sociologists have become more negative about modern society over the last decade, an analysis of the Sociological Abstracts showed a doubling in the use of gloomy words between 1970 and 2000 (Elchardus 2004: 507).

In psychology, Freud (1930) provides an outspoken example of the theory that life is getting worse. In his 1923 book “Unbehagen in der Kultur” (Society and its Discontents) Freud asserts that any social organization requires the repression of instinctual urges, and that the development of modern society necessitates ever more repression of natural impulses. Hence he believed that societal civilization is anti-thetical to human happiness and that we are typically less happy than our primitive forefathers. Likewise some evolutionary psychologists believe that natural selection cannot keep pace with societal development (e.g. Nesse 2004: 1343).

*Focus in social reporting*

Social statistics do not suggest that life is getting better in modern society, since they deal with misery in the first place. There are statistics for accidents rates, suicide rates, depression rates, drug abuse, victimization and poverty, but few for enjoyment of life. Moreover social reports tend to emphasize negative trends on these matters. This is at least the case in current western society; in the former communist countries social statistics were typically used to emphasize positive developments in an attempt to conceal a deteriorating quality-of-life.

### *Majority in public opinion*

Survey studies in modern nations show wide support for the idea that life was better in the “good old days.” In the USA the majority agrees with the statement “In spite of what some people say, the lot of the average man is getting worse, not better.” Support for this idea is growing, the percent affirmative answers rose from about 55% in the 1970s to 70% in the early 1990s. Interestingly, this idea is not reflected in self-reports of an individual’s own life, since most people feel that the quality of their personal life has improved (Hagerty 2003).

### **Relevance of the issue**

This discussion is not just some academic matter to be argued over in ivory towers; it has profound policy implications.

If modernization makes society less livable, we should try to stop the process, or at least to slow it down. Conservatives have a strong point in this case and can convincingly argue for restorative policies. However, if modernization tends to improve the quality-of-life, we need to accept this development, which would fit the liberal political agenda. In the latter case there is also ground to further modernization, which would support various reformist tendencies in advanced nations and justifies missionary activities such as “development aid” for “under developed” nations.

Another implication might be in communication. If majority opinion is wrong and life is getting better instead of worse, the public is apparently misinformed.

### **Measurement of quality-of-life in nations**

How can we assess whether life gets better or worse? This first requires a clear definition of quality-of-life and next a feasible operationalization of this concept.

### **Concepts of “quality of life”**

The term “quality-of-life” serves as a catchword for different notions of the good life. It is used in fact to denote a bunch of qualities of life, which can be ordered on the basis of the following two distinctions.

A first distinction is between *opportunities* for a good life and the *outcomes* of life. This distinction is quite common in the field of public-health research. Pre-conditions for good health, such as adequate nutrition and professional care are seldom mixed up with the concept of health. A second difference is between *external* and *inner* qualities. In the

**Table 2.1** Four qualities of life

	<i>Outer qualities</i>	<i>Inner qualities</i>
<i>Life chances</i>	Livability of environment	Life-ability of the person
<i>Life results</i>	Utility of life	Enjoyment of life

first case the quality is in the environment, in the latter it is in the individual. This distinction is also quite common in public health. External pathogens are distinguished from inner afflictions. Combining of these two dichotomies yields a fourfold matrix, presented in Table 2.1.

In the upper half of Table 2.1, we see, next to the outer opportunities in one's environment, the inner capacities required to exploit these. The environmental conditions can be denoted by the term *livability*, the personal capacities with the word *life-ability*. This difference is not new. In sociology, the distinction between "social capital" and "psychological capital" is sometimes used in this context, and in the psychology of stress the difference is labeled negatively in terms of "burden" and "bearing power."

The lower half of Table 2.1 is about the quality of life with respect to its outcomes. These outcomes can be judged by their value for one's environment and by their value for oneself. The external worth of a life is denoted by the term *utility of life*. The inner valuation of a life is called *appreciation of life*. These matters are of course related. Knowing that one's life is useful will typically add to one's appreciation of life. Yet useful lives are not always happy lives and not every "good-for-nothing" is unhappy.

#### *Livability of the environment*

The left top quadrant denotes the meaning of good living conditions, which I call "livability." One could also speak of the "habitability" of an environment, though that term is also used for the quality of housing in particular. Elsewhere I have explored the concept of livability in more detail (Veenhoven 1996: 7–9).

Ecologists see livability in the natural environment and describe it in terms of pollution, global warming and degradation of nature. Currently, they associate livability typically with environmental preservation. City planners see livability in the built environment and associate it with sewer systems, traffic jams and ghettos. Here the good life is seen to be the fruit of human intervention. In public health all these are referred to as a "sane" environment.

Society is central in the sociological view. Firstly, livability is associated with the quality of society as a whole. Classic concepts of the “good society” stress material welfare and social equality, sometimes equating the concept more or less with the welfare state. Current communitaristic notions emphasize close networks, strong norms and active voluntary associations. The reverse of this livability concept is “social fragmentation.” Secondly, livability is seen in one’s position in society. For a long time, the emphasis was on the “under-class” but currently attention is shifting to the “outer-class.” The corresponding antonyms are “deprivation” and “exclusion.”

#### *Life-ability of the person*

The right top quadrant denotes inner life-chances. That is: how well we are equipped to cope with the problems of life. I call this “life-ability,” which contrasts elegantly with “livability.”

The most common depiction of this quality of life is an absence of functional defects. This is “health” in the limited sense, sometimes referred to as “negative health.” In this context, doctors focus on unimpaired functioning of the body, while psychologists stress the absence of mental defects. This use of words presupposes a “normal” level of functioning. A good quality of life is seen to be the body and mind working as designed. This is the common meaning used in curative care.

Next to absence of disease, one can consider excellence of function. This is referred to as “positive health” and associated with energy and resilience. Psychological concepts of positive mental health also involve autonomy, reality control, creativity and inner synergy of traits and strivings. This broader definition is the favorite of the training professions and is central to the “positive psychology” movement.

#### *Utility of life*

The left bottom quadrant represents the notion that a good life must be good for something more than itself. I refer to these external turnouts as the “utility” of life.

When evaluating the external effects of a life, one can consider its functionality for the environment. In this context, doctors stress how essential a patient’s life is to their intimates. At a higher level, quality of life is seen as a contribution to society. Historians see quality in the additions an individual can make to human culture, and rate for example the lives of great inventors higher than those of anonymous peasants. Moralists see quality in the preservation of the moral order,

and would deem the life of a saint to be better than that of a sinner. In this vein, the quality of a life is also linked to effects on the ecosystem. Ecologists see more quality in a life lived in a “sustainable” manner than in the life of a polluter.

### *Enjoyment of life*

Finally, the bottom right quadrant represents the inner outcomes of life. That is the quality of life in the eye of the beholder. As we deal with conscious humans, this quality boils down to subjective appreciation of life. This is commonly referred to by terms such as “subjective well-being,” “life-satisfaction” and “happiness” in a limited sense of the word.

Humans are capable of evaluating their life in different ways. We have, in common with all higher animals, an ability to appraise our situation affectively. We feel good or bad about particular things and our mood level signals overall adaptation. As in animals these affective appraisals are automatic, but unlike other animals humans can reflect on this experience. We have an idea of how we have felt over the last year, while a cat does not. Humans can also judge life cognitively by comparing life as it is with notions of how it should be.

Happiness can be defined as the degree to which a person evaluates the overall quality of his or her present life-as-a-whole positively. In other words, how much the person likes the life he/she leads.<sup>3</sup> This evaluation appears to draw on affective information in the first place, if people appraise how happy they *are*, they estimate how well they *feel* most of the time (Veenhoven 1997: section 5).

### *Analogous concepts in biology*

In evolutionary biology, external living conditions are referred to as the “biotope” or “habitat.” A biotope can be a more or less suitable for a species, depending on e.g. availability of food, shelter and competition. This is analogous to what I call “livability.”

An organism’s capability to survive in the environment is called “fitness” by biologists. This latter term acknowledges the fact that the capabilities must meet (fit) environmental demand. This is equivalent to what I call “life-ability”

With respect to outcomes of life biologists also distinguish between external and internal effects. External effects are various ecological functions, such as being prey for other creatures, and the continuation of the species. This is analogous to what I call the “utility” of life.

**Table 2.2** Comparable concepts in biology

	<i>Outer qualities</i>	<i>Inner qualities</i>
<i>Life chances</i>	Biotope	Fitness
<i>Life results</i>	Continuation of species Ecological functions	Survival

The outcome of life for the organism itself is depicted as “survival,” which is seen to result from the fit between capabilities and environment. This notion corresponds to what I call “enjoyment of life.” Below I will argue that this is more than mere correspondence, because subjective enjoyment is also a result of fit between individual abilities and environmental demands.

These biological concepts are summarized in Table 2.2.

### **Measuring quality of life**

Quality of life in nations is usually measured using indexes that involve indicators from each of the quadrants in Table 2.1, for instance the Human Development Index (UNDP 1990) includes income per head (top left), education (top right) and life expectancy (bottom right). Yet this makes no sense and the tables help us to see why not.

#### *Comprehensive measurement not possible*

Quality of life cannot be measured by totaling quadrants. There is no point in combining the qualities in the upper and the lower half of Table 2.1, since this involves the adding of chances and outcomes. Combining the qualities at the left and the right makes little sense either and in particular not in the case of life chances, where it is not the *sum* that matters, but rather the *fit* between external conditions and inner capacities.

Still another problem is that three of these four qualities cannot be measured very well. We can only make guesses about the features that constitute the livability of an environment and it is also quite difficult to establish what abilities are most required. Though it is clear that some necessities must be met, it is not so clear what is required on top of these, and in what quantities and in what mix. Measuring the utility of life is not really feasible either, since external effects are quite diverse and often difficult to assess. Due to this lack of sound scientific criteria, any measurements depend very much on assumption and ideology and hence there is little agreement how to measure these qualities of life.

Measuring happiness is less problematic however, since happiness is an overall judgment of life, we cease to have the problem of trying to add and compare apples and oranges. As happiness is a state of mind for an individual, we can assess it rather easily by asking that person how happy he or she feels.

*Most inclusive measure is how long and happy people live*

In biology, “survival” is assumed to result from the “fit” between the abilities of the organism and environmental demands. This fit cannot be observed as such, but is typically inferred from survival rates. If an organism perishes before its programmed lifetime, there is apparently something wrong with this chance constellation.

In this line, we can also infer the life chances in a human society from the outcomes in happiness. If people live happily, their environment is apparently sufficiently livable and their abilities appropriate. This may not appeal to supporters of the theory that happiness is a culturally constructed illusion,<sup>4</sup> but it fits well with the view that happiness is a biological signal of how well we thrive.<sup>5</sup>

In simple animals, good adaptation reflects only in survival, in higher animals, good adaptation also reflects in hedonic experience. Negative affect is indicative of poor adaptation and tends to inhibit the organism, while positive affect is indicative of good adaptation and works as a “go” signal (Fredrickson 2004, Nesse 2004). So, an animal that does not feel good is probably not doing well.

This inner experience is no great issue in biology, because we cannot assess how animals feel. Still there is ground to see hedonic experience as an additional manifestation of good adaptation and in this vein one could argue that an animal that feels well most of its lifetime seems to be better adapted than an animal that lives equally long but feels less well.

Humans are capable of reflecting on their experiences, and can condense positive and negative affects into an overall appraisal of happiness. They are also capable of communicating that appraisal to investigators. Hence in the case of humans we can use the additional sign of good adaptation and assess how long *and* happy they live.

The degree to which people live long and happy is denoted in the right bottom quadrant in Table 2.1 and is the most inclusive measure of outcomes of life for the individual. It is also indicative for the qualities denoted by the two top quadrants. If people live long and happy, their environment is apparently sufficiently livable and their life-abilities appropriate. So, this measure covers in fact three of the four quadrants

and is therefore the most comprehensive measure of quality-of-life available.

Fairy tales often end with the phrase “and they lived long and happily ever after,” which is to say that the characters of the story had a good life. The concept of quality of life is then operationalized as a “long and happy life.” The reasoning above shows that this makes sense. I have underpinned this position in more detail elsewhere and distinguished this measure of “apparent” quality-of-life from current counts of “presumed” blessing (Veenhoven 1996, 2000a, 2005b).

*Also the most relevant in this context*

This chapter is about the question of whether life is getting better in modern society. As such it concerns the outcomes of life and not assumed chances for a good life. What we want to know is how modern chance constellations work out on the final results of life. Likewise, the question is not about the environmental chances, but about the outcomes for individuals. If we do not keep these matters apart, societal development is easily equated with a better life. So this is another reason to focus on the right bottom quadrant, which is best measured by how long and happy people live.

**Measure of happy life years**

The degree to which people live long and happy in a society can be measured by combining two sources of information: average longevity in the country and average happiness.

*Measurement of longevity in nations*

How long people live in a country can be assessed using civil registration and by assessing the average number of years between birth and death. This will give an adequate measure for past generations, but not those still alive. Hence, a next step is to estimate how long the living remain alive and these estimates can be generalized to give a general population average. This estimate is called “life expectancy” and is commonly used in world health statistics. Data is available for almost all countries in the world and yearly updates are published in the Human Development Reports (UNDP 2004).

*Measurement of happiness in nations*

At first sight it is more difficult to assess average happiness in nations, the concept of happiness being reputed as elusive. This may be true for some conceptions of happiness, but not for happiness as defined here.

Above happiness was defined as “the degree to which a person evaluates the overall quality of his or her present life-as-a-whole positively.” In this sense happiness is something that people have on their mind and that they are aware of. Consequently happiness in this sense can be measured by asking people how much they enjoy their life-as-a-whole. Such questions can be posed in various contexts, clinical interviews, life-review questionnaires and common survey interviews. Survey questions can be posed in different ways, directly or indirectly and by using single or multiple items. A common direct single survey question is:

Taking all together, how satisfied or dissatisfied are you currently with your life as a whole?

1	2	3	4	5	6	7	8	9	10
Dissatisfied									Satisfied

There are many qualms about such simple self-reports of happiness, in particular about their validity and about comparability across nations. Elsewhere I have considered the objections and inspected the empirical evidence for claims about bias (Veenhoven 1993, 1997). I found no proof for any of the objections, so I assume that happiness can be measured in this way. Others have come to the same conclusion (Diener 1994, Saris *et al.* 1998). Suffice to note that cross-national differences in happiness correspond in the predicted way with national rates of depression (VanHemert *et al.* 2002), and suicide ( $r = -.46$ ; own analysis).

It is now generally agreed that happiness can be measured in this way and a large literature on empirical happiness research<sup>6</sup> has developed since the 1970. Reviews of that literature can be found with Myers (1992), Diener *et al.* (1999) and Veenhoven (2006a). This research tradition has resulted in a growing body of data on happiness in nations. Presently there are comparable surveys in 91 nations. These data have been brought together in the “World Database of Happiness” (Veenhoven 2006b) and will be used here.

### *Combining with longevity*

How long and happy people live in a country can be measured by combining information about length of life, drawn from civil registrations of births and deaths, with data on average appreciation of life as assessed in surveys. The following simple formula can be applied:

$$\text{Happy-Life-Years} = \text{Life-expectancy at birth} \times 0-1 \text{ happiness}$$

Suppose that life expectancy in a country is 60 years, and that the average score on a 0 to 10-step happiness scale is 5. Converted to a 0–1 scale, the happiness score is than 0.5. The product of 60 and 0.5 is 30. So the number of happy life years is 30 in that country. If life expectancy is also 60 years but average happiness 8, the number of happy life years is 48 ( $60 \times 0.8$ ).

Theoretically, this indicator has a broad variation. The number of Happy Life Years is zero if nobody can live in the country, and will be endless if society is ideal and/or its inhabitants immortal. The practical range is between about 10 and 70 years. Presently at least, life expectancy at birth in nations varies between 40 and 80 years, while average happiness varies between 0.3 and 0.8. The number of Happy-Life-Years (HLY) will always be lower than standard life expectancy. It can equal real length of life only if everybody is perfectly happy in a country (score 1 on scale 0 to 1).

A high HLY means that citizens live both long and happily; a low HLY implies that the life of the average citizen is short and miserable. Medium HLY values can mean three things: 1) both moderate length-of-life and moderate appreciation-of-life, 2) long but unhappy life, and 3) short but happy life. I treat these intermediate outcomes as equal, but one can of course prefer one to the other.

I have described this indicator in more detail elsewhere (Veenhoven 1996, 2000a, 2005b). It scored highest in a scholarly review of social indicators (Hagerty *et al.* 2001). In a similar way the World Health Organization measures “Disability Adjusted Life Years” (DALYs) in nations (WHO 2004). In this case, life expectancy is weighted with a disability score, which is typically also derived from survey data. Because disabilities increase with age, age composition in nations must be taken into account in cross-national comparisons of DALY’s. In the case of HLY this is not required, because happiness is not related to age in the same way. There is a slight U-shaped pattern in the relation between happiness and age, happiness tending to be somewhat lower around middle age, yet this effect is not so robust that it requires correction.

### **Quality of life in modern society**

Using this indicator, we can now answer the question whether life is getting better or worse in modern society. For this purpose I will first compare the quality-of-life in developed and under-developed countries at the present time and next consider the available data on trends over the last decades.

### **Difference in Happy Life Years between more and less modern nations in the 1990s**

The present day world counts about 150 nations and for 90<sup>7</sup> of these we know how long and how happy its citizens lived in the 1990s. See the list on the World Database of Happiness (Veenhoven 2005a). These cases represent more than half of the nations in the present day world and cover about two-thirds of the world's population, since all the big countries are included.

The level of modernity or "development" of these nations can be measured in different ways; since there are different views on the essence of modernity, there are also different indicators of the matter. Some focus on the mode of production and measure modernity by the ratio of agrarian and industrial production, whereas others see mental development as the core and measure modernity using the average level of education. There are also several multi-dimensional indicators of modernity, such as the Human Development Index mentioned above and the Index of Social Progress (Estes 1984). All these measures appear to be highly correlated with buying power per head (UNPD 2000), and since this measure is available for all the nations I use it in this analysis.

In the scattergram of Figure 2.1, the number of happy life years is plotted vertically and income per head horizontally. One can easily see that there is a strong correlation, HLY being systematically higher in rich nations than in poor ones. The correlation is +.77.

The use of other indicators of modernity yields similar results. HLY is also positively correlated with industrialization ( $r = +.43$ ), informatization ( $r = +.70$ ), urbanization ( $r = +.55$ ), and also with individualization ( $r = +.66$ ). The correlations are strong and leave no doubt that people live longer and happier in the most modern societies. This point is elaborated in more detail elsewhere (Bernheim & Heylighen 2000, Diener & Diener 1996).

The pattern is similar if we consider happiness and longevity separately. The correlation of modernity, as measured by income per head, with average happiness is +.72 and the correlation with life-expectancy +.65. These effects are largely independent; controlling for life expectancy, the partial correlation of modernity with happiness is still +.64 and controlling for happiness, the partial correlation of modernity with life-expectancy is +.75! This independence of the effects is another justification for the use of this combined measure of happy life years.

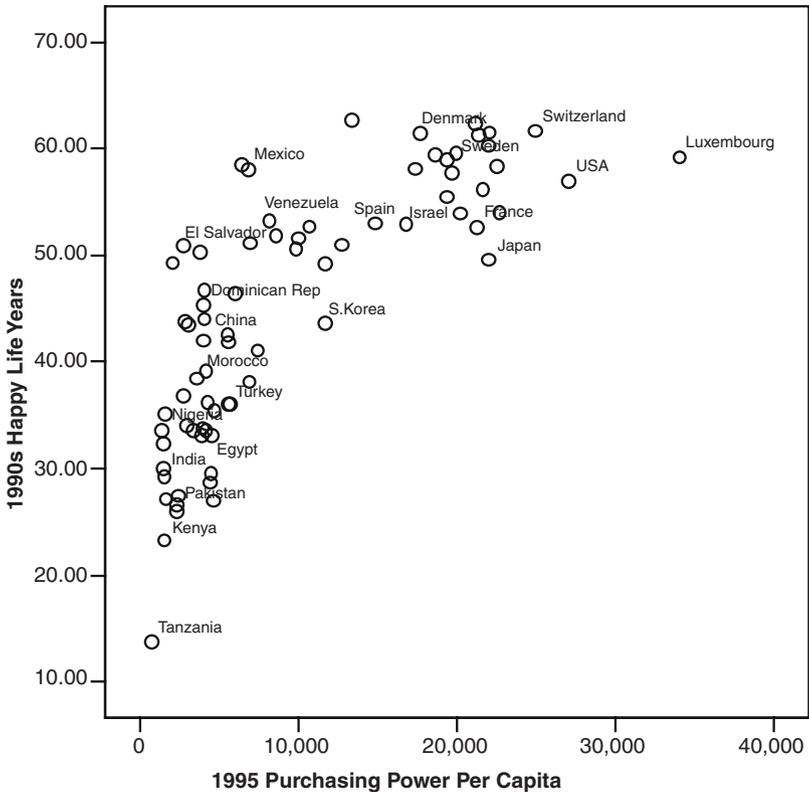


Figure 2.1 Happy Life Years and income per head in 90 nations in the 1990s

### Trend of Happy Life Years in modern nations over the last decades

The differences observed in the cross-sectional analysis above could be due to intervening variables, for example they may be due to the fact that modern nations are mainly found in moderate climate zones or to variation in genetic endowment. Such distortions can be controlled for if we compare over time within separate nations. If life is getting better, this must also manifest in a positive trend.

Assessment of the development in HLYs in nations requires trend data on happiness and life expectancy. In the case of life expectancy this is no problem, since considerable time series are available for many nations. Time series on happiness are less abundant however. Series of 30 years or longer and based on identical survey questions are available for only ten nations and these are all highly developed ones.

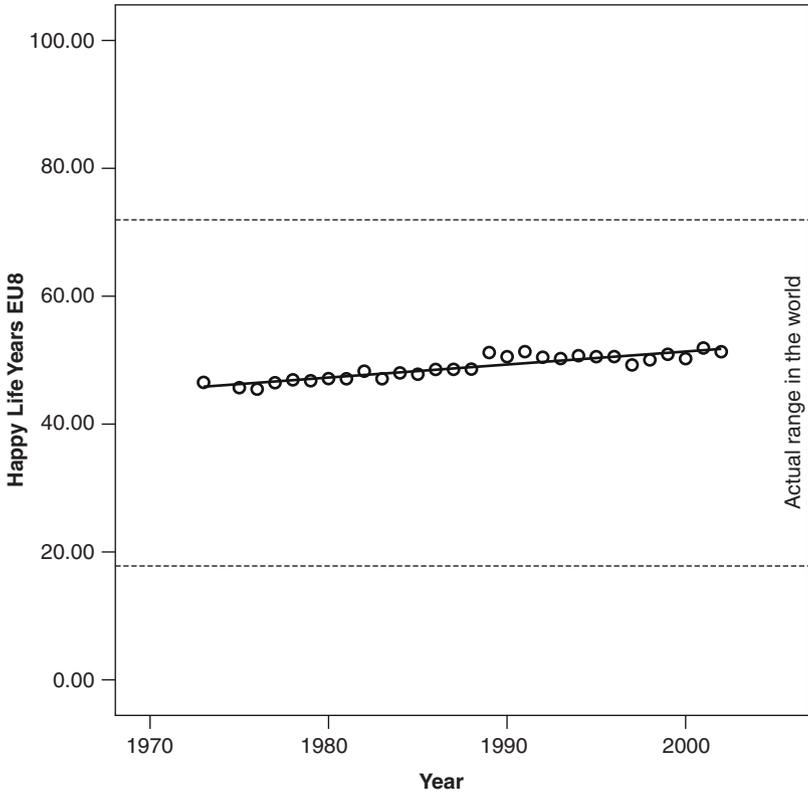


Figure 2.2 Trend Happy Life Years in 8 EU-nations 1973–2002

Eight of these nations are the early EU members, which have participated in the Eurobarometer survey since 1973. These nations are Denmark, Belgium, France, West Germany, Italy, Luxembourg, The Netherlands and the UK. Figure 2.2 presents the trend in HLYs in these countries from 1973 to 1999. A clear positive trend emerges, HLY rose from 46.5 in 1973 to 51.3 in 1999. The linear regression coefficient is  $+0.204$  and this trend is significantly different from zero, since the 95% confidence interval ranges between  $+0.167$  and  $+0.241$ . If this trend continues, West-Europeans will live 62.2 happy years in 2050,<sup>8</sup> which would mean a gain of 15.7 years in less than a century.

Similar trends are observed in the other developed nations for which data are available. In Table 2.3 we can see that this rise in HLY has also occurred in the USA and in Japan.

**Table 2.3** Trend in Happy-Life-Years in some modern nations 1973–2002

<i>Nation</i>	<i>Trend (Expressed in linear regression coefficient)</i>			<i>Rise of Happy Years</i>
	<i>Happiness</i>	<i>Life expectancy</i>	<i>Happy Life Years</i>	
Italy	+0.03	+0.25	+0.40	+11.5
Luxembourg	+0.01	+0.26	+0.26	+7.6
Denmark	+0.02	+0.12	+0.21	+6.0
France	+0.01	+0.25	+0.21	+6.0
USA	+0.01	+0.17	+0.18 <sup>9</sup>	+5.2
Germany (W)	-0.00	+0.22	+0.15	+4.4
UK	+0.00	+0.18	+0.14	+4.1
Netherlands	+0.00	+0.15	+0.13	+3.8
Japan	-0.00	+0.27	+0.15 <sup>10</sup>	+4.4
Belgium	-0.02	+0.23	-0.04	-1.0

All regression coefficients within 95% confidence interval, except one in italics

Source: Veenhoven 2005b

In most cases this pattern is due to a simultaneous rise in happiness and longevity. Yet in the UK and the USA subjective appreciation of life has remained the same and the rise in HLY is due to the lengthening of life. There is only one case of a slight decline in happiness, and that is Japan. This case is analyzed elsewhere (Stam & Veenhoven 2007).

The right column in Table 2.3 presents the estimated rise in HLY from 1973 to 2002 in all these countries. The gains are substantial, in Luxembourg more than 7 HLYs! The increases are less spectacular in most other countries, but still considerable, for instance 4.2 years in the USA.

The data do not suggest that there is a catch-up effect of greater gains in countries where HLY was low in 1973. The highest gains are observed in Luxembourg and Denmark, which scored high at the start, while the lowest gain is observed in Japan, which started at the bottom. Still, France and Italy are cases of a low start, with a big gain.

This upward trend is not the result of the happy getting happier, but rather the result of a reduction in the number of very unhappy persons in the population. This manifests in a lowering of the standard deviations in all nations, also in the ones where the average remained at the same level (Veenhoven 2005c). Likewise, the gains in life expectancy are greater at the bottom of the distribution than at the top. So the rise in HLY went together with a reduction of inequality in quality of life.

All this shows that life is getting better rather than worse, at least in the most modern nations of today.

### **Temporary drops**

This is not to say that life has got better in all countries during the last decades, HLY has not risen in Belgium, due to a decline in happiness in the 1980s. Happiness and longevity dramatically plunged in the former communist countries in the 1990s, in particular in Russia (Veenhoven 2001), probably in response to the sudden transformations in these societies. The latest data suggest that the post-communist nadir is passed.

One must also realize that the effects of economic development are less smooth than suggested in Figure 2.1. In some cases at least, early industrialization was accompanied by a shortening of life and even by a reduction in average body size (Komlos 1998). The wide variation in the left half of Figure 2.1 can be interpreted as an indication that similar things are happening in today's developing nations. Further it is beyond doubt that progress causes the "pain of incomprehension" during periods of transition (Hays 1994).

### **Quality-of-life over human history**

The above evidence concerns contemporary societies and does not rule out that quality-of-life has been better in earlier times. All the countries considered are modern to some extent. Hence these data cannot settle the question of whether we would have lived better in an ancient society.

One way to check this would be to look at the quality-of-life in present day "primitive" societies. Yet there are few such societies today and the few that remain live typically live in poor ecological conditions, impinged on by "modern" society to their detriment, i.e. being brought into contact with diseases to which they have little or no resistance and their habitat being destroyed by logging and mining. Moreover, the last century's anthropological research does not give us a clear picture of the quality-of-life in the primitive societies that were surveyed. There are accounts of positive features in such societies, such as Mead's (1953) description of relaxed sexual practices in Samoa, but there is also evidence of rampant evils, such as violence and superstition (Edgerton 1992). Anthropologists have never attempted to assess happiness, possibly because of their belief in cultural relativism.

Still, important clues can be found in historical anthropology and in particular in work by Maryanski and Turner (1992) and Sanderson (1995). This literature departs from the insight that the human species developed in the context of hunter-gatherer bands and that this type of social organization prevailed for most of the 100,000 years that *Homo sapiens* has existed. More complex kinds of societies seem to have developed only fairly recently in human history, first horticultural societies, then agrarian societies and finally our present day industrial society, which is rapidly becoming post-industrial in the west (Lenski *et al.* 1995, chapter 1). There are good indications that these types of societies were not equally livable, and in particular that the agrarian phase marked a historic dip in human quality-of-life.

#### *Less free in agrarian society*

One indication is that the development of freedom seems to have followed a U-curve over human history. Hunter-gatherer societies can impose few constraints on their members, since dissenters can support themselves for a while and join other bands. Accumulation of wealth and power is difficult, if not impossible, in these conditions and hence this kind of society tends to be free and egalitarian.

This changed profoundly in an agrarian society, where survival requires control of the land and people became more dependent on their family and vulnerable to exploitation by a warrior caste. According to Maryanski and Turner (1992) this drove mankind into the “social cage” of collectivistic society. In their view, such strong social bonds are less required in the context of industrial existence, not only because individuals get access to more relational alternatives, but also because the ongoing division of labor involves a shift of dependencies to anonymous institutions such as the state. Durkheim (1897) described that latter phenomenon as the change from “mechanic solidarity” to “organic solidarity.”

This theory fits the above observation that people live happier in the most modern societies of this time and in particular it fits the observed relation between happiness and freedom in nations (Veenhoven 1999). It also provides an explanation for the ongoing migration from the land to cities.

#### *Less healthy in agrarian society*

Another sign of the low quality-of-life in agrarian society can be found in anthropometric indicators of health. The average health of past gen-

erations can to some extent be reconstructed from human remains. On the basis of excavated bones and teeth we can estimate how long people have lived and to some degree how healthy they were when they lived.

Research along these lines suggests that people lived about equally long in early hunter-gatherer societies and later agrarian societies, but that they lived more healthily in the former than in the latter. Hunter-gatherers appear to have been better-nourished and less disease ridden than historical agrarian populations and they seem to have been less burdened with work. Much of the literature on this subject is reviewed in Sanderson (1995: 340–3). Apparently, the obvious advantages of a sedentary pastoral life are counter balanced in some way, amongst other things probably by increased exposure to disease and to social stress.

Present day industrial societies score better on anthropometric indicators than both of the other types do. We live longer and healthier than ever and also grow taller than our forefathers ever did.

Such historical data cover health and longevity and can be combined in an index of healthy life years that concurs with the measure of “Disability Adjusted Life Years” that is currently used by the World Health Organization (WHO 2004). This resembles the “Happy Life Years” I used in the above analysis of contemporary nations, but it is not quite the same. Since survey research is a recent invention we will probably never know how happy people were in the past. Hence we must make do with the available data on health and longevity. Still, these matters appear to be strongly correlated with happiness<sup>11</sup> and both can be seen as manifestations of human thriving.

If we consider the data on longevity it is also easy to see that our forefathers cannot have lived as many happy years as we do now. The average length of life was about 45, both in a hunter-gatherer society and in an agrarian society. This means that the HLY could not be higher than 45, even if everybody was perfectly happy. This is clearly below the level in present day modern nations, where HLY varies between 50 and 60 (cf. Figure 2.1).

### *Long-term pattern*

Together these data suggest that societal evolution has worked out differently on the quality of human life, first negatively in the change from hunter-gatherer existence to agriculture and next positively in the recent transformation from an agrarian to an industrial society. This pattern is depicted graphically in Figure 2.3.



Figure 2.3 Long-term trend in quality of life

It is not unlikely that the upward trend will continue in the future, both happiness and longevity are likely to rise.

Currently average happiness ranges between 3.2 (Tanzania) and 8 (Switzerland). This means that there is still much to win. There is no reason to assume that Tanzania can never reach the level of Switzerland. Possibly, average happiness can even go above an average of 8. The maximally possible average may be close to 9. An average of 10 in a nation is clearly not possible, not only because human life involves inevitable suffering but also because no society can serve everybody's needs equally well.

It is also quite likely that longevity will continue to rise. The underdeveloped nations are catching up at an unprecedented rate, and there is reason to expect that longevity will further extend in the developed world, among other things as the result of medical technology. There is speculation that the average life might be extended to 100 years or more (Manton *et al.* 1991, Vaupel & Lundström 1993). As yet, gains in length of life have not come at the cost of quality of life. Elderly people appear to be slightly happier than the middle-aged Okma and Veenhoven (1999).

The dotted trend line at the right side of Figure 2.3 depicts these projections.

## Discussion

These findings raise several questions: one is about compatibility with claims to the contrary, and in particular with reports of alarming rises in rates of depression in modern society. A second question is what are the mechanisms behind the recent rise in the quality of human life and the third is to ask why progress pessimism still prevails in the social sciences.

*No "loss of happiness in market democracies"?*

The results of this study directly contradict those of Robert Lane (2000). In his much-cited book "The loss of happiness in advanced market democracies", Lane presents evidence of declining happiness using similar survey data. How does he come to such a different conclusion? The first answer is that Lane considers only the case of the USA. As shown in Table 2.3, happiness rose only slightly in this country. Secondly, Lane presents data for an era when happiness declined slightly in the USA, i.e. the years 1972–1994. When we consider the period 1973–2002, we see no decline but rather an increase and when we consider all the available data from 1949 on we also see no decline. Thirdly, Lane only considers the trend for "very happy" responses and thus fails to acknowledge that the percentage of "unhappy" responses has declined. Ott (2001) has discussed these flaws in more detail. Fourthly, Lane has considered the responses to the happiness question in the General Social Surveys that show little variation over time.<sup>12</sup> Yet there is a positive trend in the responses on two other questions used in periodical Gallup polls (Veenhoven and Hagerty 2006). Lastly, Lane does not acknowledge that Americans live longer now and that this is a blessing given their high level of happiness. In his eagerness to promote "the medicine of more companionship," Lane has overstated the disease.

*No contradiction with rising rates of depression?*

Mental illness is no exception in modern societies, about 16% of the US citizens have experienced episodes of serious depression and every year depression interferes with effective functioning of some 6% of them for two weeks or more. There are signs of increasing rates of depression, especially among youth and there is talk about a depression epidemic (Seligman 1990: 10). How does this fit with a rising number of happy life years?

The first thing to note is that depression is strongly correlated with happiness. Depressed individuals are clearly less happy and there is a strong correlation between rates of depression and average happiness in nations (VanHemert *et al.* 2002). A second point to keep in mind is that depression is temporary in most cases, and good times can balance the bad times. Thirdly, we are not sure that the rate of depression has risen. There is an increase in the numbers for people diagnosed as being depressed, but this may be due to better recognition by professionals of the signs of depression and by better treatments being available to treat depression. It is possible that depression is less well recognized

in under developed nations, not only because the people are less aware of the syndrome, but also because bad feelings can be more easily attributed to bad conditions. However it is also possible that in modern societies people are more aware of how they feel, because they have more choice and use how they feel more to help them to assess what they want.

If there is a real rise in rates of depression in modern society, that can still co-exist with a rise in average happiness. Modernization can be to the advantage of a majority, but can come at the expense of a minority, who are pushed into depression; no society can suit the needs of all equally well. If this has happened at all, it has not resulted in a split between happy and unhappy, since the dispersion of happiness is lessening in modern societies (Veenhoven 2005c).

*Why is life getting better?*

The observed growth of years lived happily and healthily can be attributed to several factors. One is obviously that several common evils of the past have been overcome in modern societies or at least much abated. For instance, few in the West die of hunger anymore and the chance of being killed is greatly reduced. A second factor is in the increased freedom in modern individualized society. The social system allows us more opportunity to choose and we have also become more capable of making choices which, taken together, has increased our chance that we will live a life that fits our individual needs (Veenhoven 1999). This links up with a third explanation, which is that modern society provides a challenging environment that fits an innate human need for self-actualization. In this view, the human species evolved in rather tough conditions and therefore typically thrives in modern society with its complexities, competition and choices.<sup>13</sup> Probably, increased self-understanding has also contributed to the quality-of-life of modern man. Lastly, a more "critical" explanation could be that the modern nations successfully exploit the rest of the world. There may be some truth in this contention, but life is also getting better in most non-western nations. Most of the poor countries became less poor over the last decade and life expectancy is also rising in most countries (UNDP 2004).

*Why then do we still believe that life is getting worse?*

This leaves us with the question of why so many people think that our quality of life is decreasing and, in particular, why this belief is so strong among trained society watchers.

One answer to this question is that we tend to overestimate present problems; yesterday's problems are not only less vivid in our minds, but we also know that we survived them. This may link up with an innate tendency to be alert to signs of danger. This perceptual bias is enhanced by the professional interest of journalists and social scientists who earn their living dealing with social problems and for that reason tend to emphasize evil. These tendencies seem to veil our awareness of actual improvements in the quality of the life we live. Possibly this works as a self-denying prophecy; the overstatement of problems results in timely solutions.

## Conclusion

Societal evolution has not always improved the quality of life. The change from hunter-gatherer bands to agrarian society seems to have involved deterioration, but the later transition to modern industrial society brought a change for the better. We now live longer and are healthier than ever before and we are probably also happier. There are good reasons to believe that this trend will continue in the near future.

## Notes

- 1 An earlier version of this chapter was presented at the 2<sup>nd</sup> European conference on Positive Psychology, Pallanza, Italy, July 2004 and published in the *European Psychologist*, Vol. 10: 330–43.
- 2 The quality of individual life in society is only one of the themes in a wider debate about the quality of society and in fact a rather recent theme. Most of the discourse about societal development is about power, contribution to human civilization and moral value.
- 3 I have elaborated this definition in more detail elsewhere (Veenhoven 1984, chapter 2).
- 4 Elsewhere I have discussed this theory and shown that it is wrong (Veenhoven 1991, 1995).
- 5 This signal theory of happiness fits well with the findings of long-term follow-up studies that happiness predicts longevity (Danner *et al.* 2001) even when initial physical health status is controlled (Deeg & Van Zonneveld 1989).
- 6 This research line is also known research by different names, such as: "Subjective Well-Being" (SWB). "Life Satisfaction" and "Positive Affectivity."
- 7 Data on happiness were drawn from the World Value Survey in 80 cases, and from the Penn World Survey in ten cases. Since difference in questions and framing might influence the results, I also analyzed the 80 WVS countries separately. The result did not change.
- 8 This is an illustrative linear extrapolation, which does not take into account that there is a maximum to average happiness and that the trend will probably fall off when approaching this ceiling.

- 9 Over the period 1963–2002 the trend in HLY is slightly more positive in the USA: +.190 [+ .180; +.201], which means a gain of 741 happy life years.
- 10 Over the period 1958–2002 the trend in HLY is clearly positive in the Japan: +.147 [+ .106; +.188].
- 11 See note 5.
- 12 The change coefficient of happiness in the USA in Table 2.3 is based on this GSS item, and present the most conservative estimate.
- 13 In this line I have explained why people do not thrive better in welfare states (Veenhoven 2000b).

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## **Part II**

# **Determinants and Origins of Happiness: The Conceptual Framework**

# 3

## “The ‘Three Happinesses’ and Public Policy”

*Lok Sang Ho*

I had found no significant relationship between happiness and time over a period in which GDP per capita grew by one-third, from 1972 to 1991 (Easterlin 1995, pp. 37–8). Charles Kenny (1999, pp. 14–15), based on a correlation of happiness with GDP per capita over the period 1952 to 1988, found a significant negative relationship in the United States... [O]ne needs to develop an empirically tested causal model that includes the life satisfaction derived from multiple sources – not just material goods, but also family life, health, work utility, and the like (Easterlin 2003). A better understanding of the causes of happiness will provide a more secure foundation for policy recommendations.

Richard Easterlin (2004b)

To be without some of the things you want is an indispensable part of happiness.

Bertrand Russell

Virtue is not an end in itself. Virtue is not its own reward.... Life is the reward of virtue – and happiness is the goal and reward of life.<sup>1</sup>

Ayn Rand

### **I Introduction: Happiness as a common pursuit, and government an instrument to further this common pursuit**

In the American Declaration of Independence (1776), it is stated:

We hold these Truths to be self-evident, that all Men are created equal, that they are endowed by their Creator with certain unalienable Rights, that among these are Life, Liberty, and the Pursuit of Happiness – That to secure these Rights, Governments are instituted among Men, deriving their just Powers from the Consent of the Governed, that whenever any Form of Government becomes destructive of these Ends, it is the Right of the People to alter or to abolish it, and to institute new Government, laying its Foundation on such Principles, and organizing its Powers in such Form, as to them shall seem most likely to effect their safety and Happiness.

In this famous passage, which is meant to state a universal truth and not just an American dream, the word Happiness has been stated twice and capitalized. The pursuit of Happiness is listed alongside Life and Liberty as one of three naturally endowed unalienable rights, and effecting the safety and Happiness of the People is clearly stated as the final goal of any government.<sup>2</sup>

In this chapter, we will explore the nature of happiness and its determinants, and in particular the kind of institutions most likely to enhance happiness. Section II will argue that utility in Bentham's sense is not happiness. Section III will present a theory of happiness and propose a framework involving a "forward looking happiness," a "happiness in process," and finally a "backward looking happiness." Section IV uses this framework to explain some paradoxes that have been referred to by various happiness scholars. Section V then goes on to examine some policy implications of the framework. Here I shall argue that policy design should aim at maximizing the *ex ante* welfare of the representative individual, rather than "maximizing the greatest happiness of the greatest number" as advocated by Bentham, and I shall relate *ex ante* welfare to Rawlsian justice as well as to the concept of "residual risk," which is the risk one gets exposed to involuntarily. Finally Section VI argues that "conflict resolution," both internal within one's mind and external in terms of relating harmoniously to other individuals, will enhance happiness and we define such a holistic attitude to life "spiritual practice." Thus "spiritual practice" is not mystical or "other worldly" at all. Rather it just entails overcoming one's own weaknesses and handicaps, developing one's full potential, and taking a holistic view of one's life instead of being excessively concerned about marginal gains and marginal losses of the moment. This "transcendental attitude" would seem to be directly in conflict with economic principles of maximization but is a natural development as one becomes more mature and developed spiritually over time.

## II Utility vs. happiness: What happiness is not

Economists have studied human behavior for centuries and have always assumed human beings to be “utility maximizers.” The father of utilitarianism, Jeremy Bentham (1748–1832), is reputed to have held it a “sacred truth” that “the greatest happiness of the greatest number is the foundation of morals and legislation”. In his book, *Introduction to the Principles of Morals and Legislation* (1789), Bentham argued that every institution and action should be guided by the consideration of what would effect the greatest happiness of the greatest number.

Is utility the same as happiness? One might consider this as just a matter of semantics. But the way “utility” as used both by Bentham and in the economic profession in general is NOT happiness as understood by the man in the street. An introduction to economics textbook would, for example, illustrate utility as a function of food and clothing, for example. But while having more or better food and clothing gives one more utility it is not obvious that greater happiness necessarily follows, even though the lack of such most probably does lead to unhappiness. As Yew-Kwang Ng (Ng 2002) pointed out, citing Diener and Suh 1999, p. 444, East-Asian regions score rather low in life satisfaction (China 4.00, Korea 4.98, Hong Kong 5.07, Japan 5.14, Singapore 5.72) in comparison to several countries of lower per capita incomes (Nigeria 5.11, India 5.15, Pakistan 5.49, Peru 5.77, Egypt 6.14, Colombia 6.20). In the same article, Ng also cited works showing that “individuals who strongly value extrinsic goals (e.g. fame, wealth, image) relative to intrinsic goals (e.g. personal development, relatedness, community) have less happiness (Ryan *et al.* 1999)”.

Moreover, “Materialism, a preoccupation with economic well-being, is negatively correlated with SWB [subjective well-being], and especially so in those that believe that more money would make one happier.” (Offer 2000, p. 20). This result is actually borne out in a recent survey conducted in Hong Kong by the author.<sup>3</sup>

We know of various people who, despite serious physical handicap, self report as being very happy notwithstanding the disutility associated with the handicaps. Mattie J.T. Stepanek is a young boy suffering from muscular dystrophy. But he wrote several books of poetry that has touched the hearts of many.<sup>4</sup> One proud Japanese young man Ototake Hirotada was born with humps rather than limbs, but he struggled hard and overcame the handicap and became a renowned author preaching the joy of life. One young Chinese woman, called Luo Pei-yong, born without forearms, learnt successfully in mastering

calligraphy and Chinese painting with her toes and was obviously very satisfied with her achievements and her life (*Mingpao* Nov. 25, 2004).

These stories strongly call into question any suggestion that happiness could be identified with utility.<sup>5</sup> Bentham's "felicific calculus" that would take into account the intensity, duration, likelihood, extent, etc. of pleasures and pains, would then seem to be totally misplaced. While Bentham did use the term happiness and utility interchangeably, and while human beings do tend to shun pain and have an affinity for pleasure, it is apparent that happiness is not the simple summation of all positive utilities subtracting all the negative (dis-) utilities. I define happiness or the lack of it as a state of mind synonymous with "subjective well-being" that is subject to a meaningful ordering and that takes the *totality* of one's life experience and values into account. This definition, as it happens, corresponds with Rand's definition, who wrote: "Happiness is that state of consciousness which proceeds from the achievement of one's values."<sup>6</sup> Rand believes that there are "three cardinal values": reason, purpose, and self-esteem," which constitute "the means to and the realization of one's ultimate value, one's own life" (VOS, 27) as a rational being, and, therefore, one's own happiness, conceived of as a "successful state of life" and its emotional concomitant (AS, 932).

### III A Theory of happiness

To the extent that utility has value, happiness and unhappiness certainly have something to do with "utility" and "disutility," but it is far more complicated than utility.

For analytical convenience we can identify three types of happiness: a "prospective happiness" (*ex ante* realized welfare) based on forward looking considerations, a "happiness in process" based on the experience of the here and the now, and a "retrospective happiness" based on backward looking considerations. This distinction is certainly artificial, but it is nevertheless useful. It is artificial because all three kinds of happiness are interconnected. Prospective happiness will not make sense without the "happiness in process" that is anticipated. "Happiness in process," similarly, is often related to prospective happiness which drives the learning process so that "happiness in process" can actually happen. "Retrospective happiness" is based on a sense of achievement – something not possible without the endeavor that has gone on in the past.

Although labeled as such, all three types of happiness are real and *are all realized* momentarily: one actually experiences happiness at the prospect of seeing one's loved ones after a long separation; just as one feels the thrill of a reunion or the playing of a musical instrument (process), and just as one cherishes and enjoys reflecting on moments experienced in the past (retrospective).

Daniel Kahneman, Peter P. Wakker and Rakesh Sarin (1997) discussed two concepts related to the first two types of happiness discussed herein. They distinguished two senses of utility. One, dubbed "experienced utility," is a hedonic quality, corresponds with Bentham's usage. They also considered a forward-looking "decision utility," which they defined as the "weight of an outcome in a decision," i.e., the subjective value of an outcome in a decision prior to the event. However, from the examples with which they explained the concept, it is clear that "decision utility" is *not* realized utility and NOT the *ex ante* realized welfare as we defined it. Decision utility *a la* Kahneman is just the implicit numbers that order choices or alternatives prior to an event. It draws its significance not from its direct welfare implications but from its effects on the decision. In contrast, my *ex ante* realized welfare

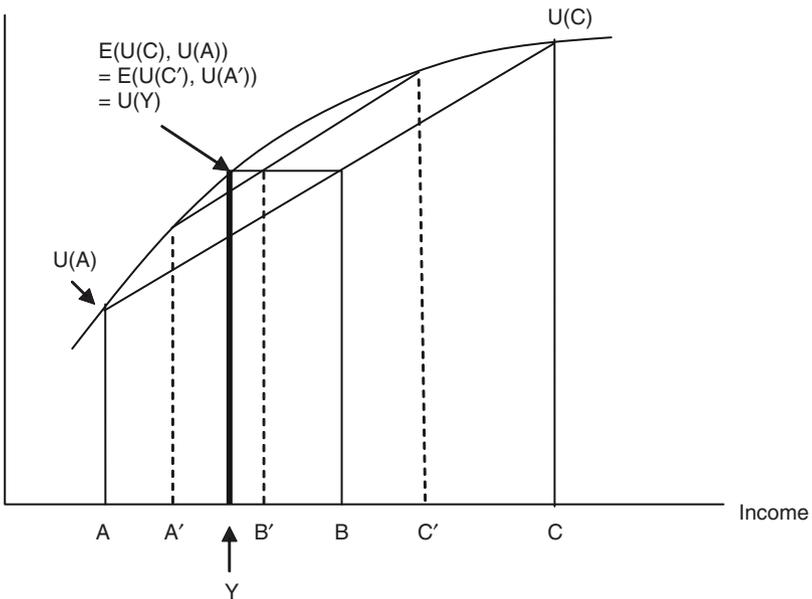


Figure 3.1 Expected utility as mathematical expectation

refers to the state of well-being as one confronts the future. If the future is hazardous and unpredictable, he *is* worried; if the future is full of promise, he *is* happy. This is also different from expected utility in the Von Neumann-Morgenstern sense.

Referring to Figure 3.1, under the Von Neumann-Morgenstern framework, the two prospects, that with expected income  $B$ , and the other with expected income  $B'$ , have equal certainty equivalents because they have the same expected utility (mathematical expectations). Here  $U(A)$  and  $U(C)$  are the *ex post* realized utilities under the fortunate and the unfortunate scenarios respectively for the more risky prospect, while  $U(A')$  and  $U(C')$  are the *ex post* realized utilities under the fortunate and the unfortunate scenarios respectively for the less risky prospect. Under the Von Neumann-Morgenstern framework the individual is taken to be indifferent between prospects that have the same certainty equivalent values defined in this way.

The theory of prospective welfare, however, says that in practice human perception is not like this. The prior or *ex ante* valuation of a more risky prospect tends to be higher than the *ex ante* valuation of the less risky prospect, even though they may have the same expected utilities. There exists a utility function other than based on *ex post* realized incomes. The *ex ante* utility function considers the *ex post* utilities that may obtain under alternative states of the world, but also the probability distribution of these *ex post* utilities.

Thus  $E(U_1, U_2) = E(U_1', U_2')$  is not a sufficient condition for them to be equivalent to the individual at the time of decision making. The VN-M framework considers only the restrictive case such that utility is always only a function of realized outcomes. In reality, however, the state of well-being of an individual is often immediately affected by the prospect that one faces. This is not irrational. This is as rational as a person avoiding spicy food. Particularly for individuals who have to make decisions when repeated choices is not possible, mathematically expected values may not have much relevance.

The curved lines in Figure 3.2 trace out the *ex ante* realized utility associated with different probability combinations for the higher and the lower *ex post* utilities. Thus, even though the prospects  $(A, C)$  and  $(A', C')$  have exactly the same expected utilities, the disutility of the risky prospect for  $(A', C')$ , which is equal to the gap between the 45 degree line and the inner thick curved line, is always smaller than that of the risky prospect for  $(A, C)$ . As explained above, for a risk-averse individual to prefer the former to the latter is not irrational, because in practice the life span of an individual is finite and there

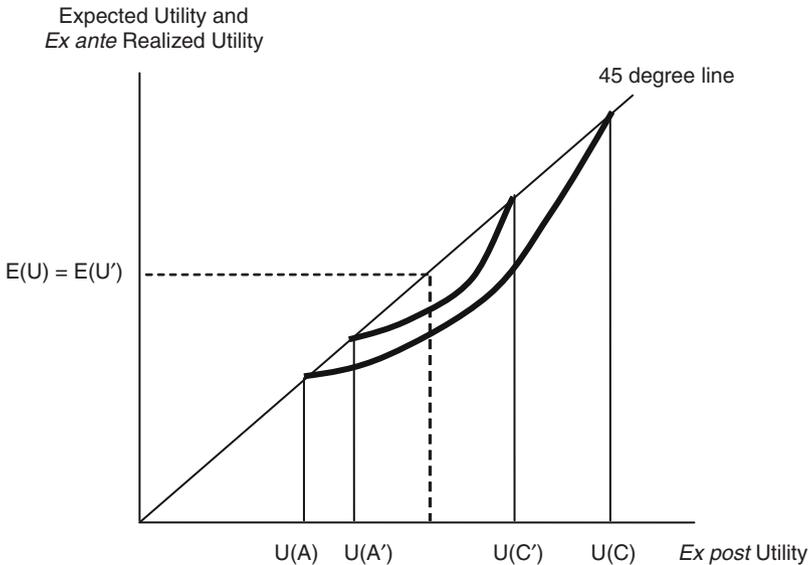


Figure 3.2 *Ex ante* utility vs expected utility

may not be many opportunities of the same prospect repeating itself in the relevant time horizon of the individual. Under many circumstances, the individual simply cannot afford to face the scenario of misfortune.

Thus we can appreciate why people are so alarmed by the SARS episode. Although people are told that the chances of contracting and dying from SARS are very low, i.e., their expected *ex post* utilities may not have been much affected, they *are* worried. This means that there is a loss of realized utility just *at the prospect of* a minimal chance of contracting the disease. Similarly, when an armed robbery has occurred in a community, there is an immediate loss of utility – which is an *ex ante* realized utility loss because the decline in utility has been realized and is due to the prospect of an armed robbery occurring again in the community. In particular, I pointed out that the von Neumann Morgenstern expected utility theory had ignored the *ex ante* discount to expected utility due to perceived risk. Risk as perceived is often (though not necessarily) a mental bad<sup>7</sup> and elicits a discount in the “*ex ante* realized utility.” In conclusion, the state of happiness or unhappiness may be “*forward looking*” in nature: it may have to do with perceptions about various possibilities that are in the offing, involving

perhaps a sense of risk or a sense of security or insecurity, or perhaps even a sense of excitement as one prospects the future. *Ex ante* utility may command a premium as well as a discount over expected utility. For example, anticipation of the successful mastery of the skills of playing an instrument gives the drilling a purpose. Looking forward to the time when one can play the instrument really well, the violin student trains hard and enjoys the otherwise dreary and stressful training. This aspect corresponds to “purpose” among Rand’s three “cardinal values.”

The “experienced utility” discussed by Kahneman *et al.* appears to be identical to Bentham’s utility. Indeed “Back to Bentham” is the title of their 1997 paper. However, our sense of “happiness in process” may encompass much more than Bentham’s hedonic utility. Quite apart from the enjoyment of such things as good food and good drinks and good company (hedonic utility), people feel happy if they are true to their inner “calling” and are given the opportunity to pursue what they want and to live out their beliefs. Thus, Nietzsche aspires “to learn more and more to see as beautiful what is necessary in things,” so he “shall be one of those who make things beautiful,” while Socrates preferred to die in dignity and to remain faithful to his beliefs till his very end.

Thus when the aspiring musician works hard and becomes a musician, or when the aspiring sculptor works hard and is engulfed in his work, or when the aspiring scientist works hard and discovers more and more about the universe, they may feel happy in the process (as well as in anticipation given their identified purposes). But simply saying that “work gives people utility” would miss the true nature of this happiness, for the happiness is not inherent in the work itself. Rather it comes from the “self-actualization” experience *a la* Maslow (1970). For this reason, there is a big difference between working as one chooses and as one wants to work on the one hand, and working as one is ordered to work or as one is compelled to work as a breadwinner on the other.

Then there is a retrospective or “backward looking” happiness. It is backward looking in the sense that people feel satisfied or dissatisfied upon looking back and considering what one has done and gone through. Thus people get fulfillment by fighting very hard for their dreams. Such fulfillment could have been impossible if they could get what they wanted at the pressing of a button. People cheer others’ achievements, but achievements would never have been achievements without the difficulties. Human beings feel happy when they have a

fulfilled life but this might not even be possible if they had never experienced pain or a sense of loss. This shows that, paradoxically, experiences that momentarily produce “negative utility” may enhance happiness over the long run.

“Backward looking happiness” may of course also be negative. For example, there is the unhappiness associated with regretting over what one has done and sighing over what one has missed or lost. Once again, we see how important “attitudes” are in determining whether a particular experience is a “plus” or a “minus” in one’s life. This dimension would have eluded those economists who are just focused on happiness in process in the hedonic sense.

Hedonic utility certainly has a part to play in these valuations, and for some people it could even be the whole purpose of life, but it is a far cry from directly representing happiness – certainly not for everybody. Moreover or alternatively, happiness may transcend the “characteristics” or physical “attributes” from consumption activities *a la* Lancaster (1966) and Becker (1965),<sup>8</sup> and include the satisfaction from the “mental goods” that result from various household activities, particularly cultural, religious, and educational activities. It must be pointed out, however, that the formation of mental goods such as a sense of achievement and doing something meaningful and a good self image, or mental bads such as jealousy, a sense of doing meaningless things, and hatred, is not just determined by the activities but also by the social-economic-political environment and by attitudes. With attitudes being an important determinant of mental goods and bads, activities that affect the formation of attitudes may have a far stronger impact on human welfare than the production of market goods and services.

Algebraically, we can write a “happiness function”:

$$H(M(A, \alpha, h), U(A, h)) \quad (1)$$

where  $H$  is the degree of happiness (the ultimate indicator of well-being) and is a function of  $M$ , a vector of *mental* qualities (both good and bad), and  $U$ , a vector of *physical* utilities (both good and bad). Mental goods and mental bads  $M$  are functions of (i) activities  $A$  (past, present, and future), (ii) attitudes and values  $\alpha$ , and (iii) health  $h$  (measured in number of equivalent healthy days). Physical utilities  $U$  are functions of activities  $A$  and  $h$ . The socio-economic-political-physical environment interacts with income to determine the opportunities available.

Because of perception problems and human weaknesses, behaviorally people may not act to maximize their true happiness function (1). Instead, they may maximize a “behavioral objective function”:

$$V(U(A, h), \Omega) \quad (2)$$

where  $V$  is value to be maximized behaviorally.  $U$  is physical utility,  $\Omega$  is the set of intermediate objectives chosen. Such objectives may be a professional qualification, getting good grades in examinations, or winning the heart of a loved one. A comparison of (2) with (1) suggests that the individual may not be that rational, in that while mental goods and bads are important factors behind happiness the maximization behavior of individuals may not consciously pursue after the intangible mental goods and avoid the intangible mental bads. On the other hand they tend to be more aware of the physical utilities  $U$ . For example, those who try to “keep up with the Joneses” are aware of the utilities of the conspicuous objects of consumption that they buy, but are less aware of the nature of the mental goods involved in the pursuit.

To reiterate, happiness is defined as the state of total well-being. The degree of happiness depends on the presence of “mental goods” and/or “mental bads,” as well as physical utilities. Mental goods and mental bads are, however, *derivatives* of household activities that may include consumption, as well as the external environment which mold the value system of individuals and their attitude. Whereas economists have traditionally taken attitude and the value system as given, in fact they evolve with the social institutions and are affected by cultural and educational activities.

#### IV Some applications to explain observed behavior

With this general framework, we can now offer some explanations for some paradoxical observations:

- Sometimes, the perception of one’s relative position in a group in terms of consumption matters even more than the absolute level of consumption (Galbraith 1958; Layard 2003). Galbraith in his book *The Affluent Society* had vehemently criticized modern enterprises as creating demand that never existed before. He pointed to the “rat race,” particularly people’s vain attempt to keep up with the Joneses, and saw the folly and the wastefulness of the activity.

The rat race is actually a pursuit for a mental good that may be described as self affirmation. A “culture” of self affirmation by matching others’ consumption level is extremely wasteful. If the valuable mental good is self affirmation, it may be achieved by a myriad of ways – provided that these alternative, more economical, ways are supported by education, cultural environment, and the right set of institutions.

- When given a choice between getting \$1000 with certainty on the one hand, or having a 50% chance of getting \$2500 and 50% chance of getting nothing on the other hand, many people choose the certain \$1000 in preference to the uncertain chance of getting \$2500 even though the mathematical expectation of the uncertain option is \$1250.

This can be easily explained with a risk discount associated with the uncertain prospect of getting 0 or \$2500. “A bird in hand is better than two in the forest.” The fact that many opportunities in life are a “one-shot” deal that will not recur renders mathematical expectations not relevant or subject to big discounts.

- Kahneman and Tversky found that the same people when confronted with a certain loss of \$1000 versus a 50% chance of no loss or a \$2500 loss do often choose the risky alternative. In this case people appear to seek rather than to avoid risk.

The fact that people who appear to be risk averse in the former example may opt for the riskier prospect indicates that perceptions are not symmetrical. To some, \$2500 loss is a loss just as \$1000 is a loss. Having a 50% chance of not losing anything appears attractive.

- Peter Bernstein cites an experiment by Richard Thaler in which students were told to assume they had just won \$30 and were offered a coin-flip upon which they would win or lose \$9. Seventy per cent of the students opted for the coin-flip. When other students were offered \$30 for certain versus a coin-flip in which they got either \$21 or \$39 a much smaller proportion, 43%, opted for the coin-flip.

People consider a windfall as something that occurred just by sheer luck and so costs nothing or very little. So they are more ready to take risky positions having won a windfall. On the other hand when the 30 dollars were not presented as a windfall they are more cautious of risking their money.

These examples indicate the importance of *benchmarking* in decision making. When presented with too many choices, benchmarking becomes difficult and the individual becomes disoriented. Just as Kahneman pointed out, a key explanation for people's apparently inconsistent choices lies in the imperfection of *perceptions*. Just as in a Newtonian world, benchmarking allows the perception of relative movements which have no intrinsic absolute meanings. Perceptions vary with the way the situation is presented because the way a situation is presented affects the choice of the benchmark. The flimsiness of perceptions suggests how shaky most studies of cost and benefit analysis are because their validity hinges on the assumptions that "to choose is to prefer" and that we can infer peoples' valuation of alternatives just by looking at their behavior, which is assumed to be based on informed rational choice. Such studies will fall apart if perceptions are flawed.

- Schwartz (2003) noted that very often, contrary to what is frequently assumed by economists, "more is less" in the sense that, when confronted with a huge variety of choices, the decision maker loses orientation and becomes panicky.

This has to do with the forward-looking valuation of various prospects. Faced with more prospects than one can evaluate and the absence of any natural benchmark or reference point, one may become disoriented. A sense of disorientation is a mental bad.

*Proposition One: Given that perceptions and the value system count at least as much as ex post utilitarian utility in peoples' behavior and effective state of welfare, if we are concerned about the condition of the human existence, and if we are concerned about effectively utilizing our resources to bring about a better outcome, we had better deal with the "culturally determined" utility function and the flaws of perception. The cost of ignoring these factors may be huge.*

A theory of happiness based on mental goods and mental bads, rather than (or in addition to) sensory goods and bads, has important implications for public policy. I venture to propose that the common mental goods include the following:

- (1) a sense of autonomy
- (2) perceived freedom from the threat of hunger, cold, the torture of illness, and other physical ailments, and a sense of safety from bodily harm

- (3) perceived freedom from a sense of loss
- (4) a sense of achievement, i.e., accomplishing what one has wanted to do for a long time.
- (5) self esteem: the feeling of one's worthiness
- (6) a sense of being accepted and respected
- (7) a sense of being in command of oneself
- (8) loving and being loved

On the other hand some of the mental bads that will make people unhappy are:

- (1) a sense of having one's free will subjected to others' demands (external)
- (2) a sense of losing command over oneself
- (3) threat from hunger, cold, the torture of illness, and other physical ailments, and the threat of bodily harm
- (4) a sense of loss, such as arising from the loss of a friend or a beloved one or a treasured good.
- (5) a sense of frustration, which may also be associated with a sense of being betrayed
- (6) loss of self esteem
- (7) a sense of being rejected and treated with contempt
- (8) not being loved and not able to love others
- (9) hate
- (10) jealousy

## V Policy implications

We will now look at some policy implications.

- (a) Hard work pays for a "worthy purpose"

It is noteworthy that an aspiring musician training hard to improve his command over a beloved musical instrument may not complain of hard work and may actually enjoy the hard work. On the other hand a child who trains unwillingly at the command of the mother may feel quite miserable. The "disutility" of the training gives the aspiring musician a sense of accomplishment. The prospect of improving one's skills gives the aspiring musician a purpose and thus *ex ante* utility. The unhappiness over the "disutility" of the forced training, on the other hand, stems from the absence of an identified purpose of that exertion and the loss of autonomy.

*Proposition Two: It is not for policy makers or the government to tell individuals what is a worthy purpose. But having an identified purpose does make a great difference in one's subjective well-being. So nurturing a purpose that is economically sound and achievable will make people happier, often even more so than the production of goods and services. Providing an environment that encourages individuals to identify a mutually achievable (as opposed to a mutually exclusive) purpose, whatever it is, is therefore economically valuable.*

(b) *Ex ante* welfare and the superiority of the market economy

Let us go back to the American Declaration of Independence. Many, if not all, Americans take pride in the American Declaration of Independence, and they take pride in the American constitution, particularly the ten amendments or the so called Bill of Rights. There is little doubt that this sense of pride contributes to the happiness of the American people. There is little doubt that the Bill of Rights has made Americans relatively free from oppression and safer than the peoples of many other nations who do not enjoy the protection of such rights. This freedom from oppression and sense of security has contributed to what is called "*ex ante* welfare" and has lured many aspiring immigrants all over the world.

To explain *ex ante* welfare, consider the market economy, which allows every producer the opportunity to compete in selling his/her products and services in the factor market and every consumer the opportunity to compete for his/her preferred products and services for consumption. Under this set up there will be some successful entrepreneurs who make a fortune and realize their dreams and some unsuccessful ones who eventually lose their fortune. Some workers will earn much while others earn very little. Some stay on career jobs and rise to the top while others fall into the ranks of the long term unemployed. Yet, *ex ante*, while people do not know where they would end up they nevertheless may prefer this system to a command economy in which a central planner dictates where one works and the ration that one consumes. That is to say, *ex post*, some people could be worse off under a market economy than under a centrally planned economy, but *ex ante* everybody may prefer the market economy. Modern history tells us that there is actually a revealed preference for market economy over the command economy, and the reason is simple. *It is that a market economy, by respecting and preserving the autonomy of individuals, is more akin to human nature.* Because people prefer the market economy *ex ante*, we say that their *ex ante* welfare under the market economy is higher, particularly when the government provides a social safety net that protects people from misfortunes.

*Proposition Three. The market economy, by allowing individuals to exercise their autonomy and choices, is preferred over the command economy.*

(c) The representative individual construct, human rights, and Rawlsian justice

John Rawls in his *Theory of Justice* (1971) contended that in order to decide if a set of institutions is just, we would have to do a mental experiment, namely to imagine that we suddenly had lost our identity and were all behind a “veil of ignorance” as to where we stood in society.<sup>9</sup> We would imagine that we could fall into the shoes of anyone within the society and face the eventualities as prevailed under that set of institutions. Since we are all averse to extreme risks, we would put much weight on the welfare of the most unlucky member of society, so much so that according to one common interpretation among economists “social welfare” is, under the Rawlsian framework, exclusively determined by the welfare of this unlucky fellow.

While I do not agree with this interpretation of Rawls, I agree that it is indeed important to consider the extreme risks to which the “representative individual” is faced with. In making decisions that will affect future outcomes, individuals acting impartially will need to consider the possibility that they could be the unfortunate ones suffering from the worst scenario that might befall members of a society. Consider a hypothetical “game,” under which one among a hundred is selected randomly to serve the rest for the rest of one’s life. *Ex post*, the utilities enjoyed by 99 individuals will be higher, yet *ex ante* the set up is likely to be rejected by everybody. Moreover, while *ex post* utilities are higher for the 99, they need not be happier. Unlike in the case of the market economy, which people generally prefer over the command economy, even though risks are higher, here people do not willingly take up the risk. The knowledge that a member of the 100 is victimized against his wish and that this misfortune could befall oneself would undermine happiness.

The limitation of the Benthamite concept of maximizing the greatest happiness of the greatest number is now apparent. Will victimizing one individual to benefit the rest improve social welfare? Is increasing the population by 10% while reducing the welfare of the existing population by 5% an improvement? If this is not an improvement, how about increasing the population by 20%? This line of reason stretches our imagination and borders on being ridiculous. On the other hand, under the *ex ante* welfare for the representative individual approach, we will ask if the representative individual – i.e., someone who has no

presumed identity within the society, will prefer to see a 5% decline in welfare and a 10% increase in the population. If he says no, there is no point in arguing for reducing the welfare of the existing population by 5% and increasing the population.

*Proposition Four* The framework of a representative individual confronting different possibilities and making decisions *ex ante* is more appropriate than the Benthamite “greatest happiness for the greatest number” framework.

(d) Residual risks, worries, and insurance

While people may accept being exposed to some risks – as long as they have the freedom and the autonomy to do so, people generally want to avoid great risks that are thrust upon them. For example the risk of being knocked down by a car that goes out of control is called a residual risk because it is unavoidable and involuntary. Knowledge of the presence of such residual risks always reduces *ex ante* welfare. The availability of insurance, private or social, that protects against the worst scenarios and offers “peace of mind” enhances prospective or *ex ante* happiness.

*Proposition Five* Insurance mechanisms as well as other provisions that reduce the impact of residual risks or reduce residual risks enhance social welfare.

(e) Excessive choices and anxiety

Economists traditionally regard the existence of more choices as enhancing utility. But we know from our own experience that having too many choices is confusing and often results in anxiety. The fact is that choices require decision and decisions are often difficult because there is uncertainty and because information is costly. Being confronted with too many choices for one to intelligently grasp is confusing and bewildering. The prospect of unfathomable risks and the uncertainty of multiple possibilities cause anxiety and reduces happiness.

*Proposition Six* Providing more choices is not necessarily welfare enhancing.

(f) Transcendental happiness and attitude training

Thus while Bentham would have us think of utilities as additive and either positive or negative, happiness may be enhanced by the existence of strains, difficulties, and strains in life, which alert us of the value of respect, courage, perseverance, and love. Happiness may therefore be “transcendental.” This means that the total “utility” or “disutility” deriving from an activity or an experience may not be inherent in

that activity or experience alone. A handicap may actually turn out to be a blessing in disguise, while an apparent good fortune may turn out to be a curse. In contrast, “utilitarian utility” is limiting and partial. “Transcendental happiness” – an enduring happiness that is the result of taking the totality of the life experience as a whole, requires an awakening and is enduring. Utilitarian utility is physical and impulsive and is more transient.

Thus happiness requires a kind of “conflict resolution.” There is, in particular, an internal conflict that needs to be resolved (see George Ainslie 1992). It requires an ability to assess the situation and to ignore distracting information and knowing what to do in the face of competing or conflicting wants. The human mind is not only subject to competing desires, but also subject to all kinds of fears and worries. These fears and worries have to do with the prospect of “disutility” arising from failing to achieve identified goals, losing wealth or health, failing to meet others’ expectations, etc. The failure to resolve these conflicts, as well as the failure to deal with these fears and worries may cause much anxiety and stress.<sup>10</sup> This internal conflict resolution is non-rivalrous in the sense that one’s achieving it will not diminish the conflict resolution achieved by another one. The training for such conflict resolution is defined “spirituality,” and appears to be the common goal of many religions.

*Proposition Seven: Happiness does not come just from without and certainly comes at least as much from within. Attitudes are an important determinant of happiness. Nurturing a positive attitude in people and a desire for “internal conflict resolution” are at least as important as economic growth in promoting human welfare.*

*Proposition Eight: Much anxiety or unhappiness arises when people strive for goals that are contestable and rivalrous, such as being “above average” in performance. Identifying mutually compatible or commonly achievable goals reduces interpersonal conflicts, jealousy, and anxiety and enhances happiness. A society that fosters commonly achievable goals engenders more social cohesion and can be said to have more social capital.*

## VI Conclusions

Religion has always been an important part of human history. If the various religions can coexist peacefully, by forging attitudes and cultivating purposes that free people from the bondage of material well-being *per se* and that inspire people to pursue mutually compatible

goals, religions could be a great enterprise for humanity, in the sense that they may enhance happiness even in the face of limited resources. On the other hand, when people pursue mutually incompatible goals such as conspicuous consumption, they may remain unhappy even in the presence of a relative abundance of resources.

One such mutually compatible purpose is the overcoming of one's apparently inherent weaknesses, and finding meaning behind the entire life experience, and at enjoying the freedom from the internal conflicts that often disturb many individuals. In contrast to physical or Benthamite utility, "transcendental happiness" is not the sum of positive utilities minus the negative utilities. A gain is then not necessarily a gain and a loss is not necessarily a loss. The calculating, utility maximizing mind gives way to an uncalculating, loving, and selfless mind that may be called spirituality. By the same token, the obsessive concern about relative positioning in society, which is admittedly very common, can hardly be truly satisfied, since people suffering from the trait would have to be on the watch all the time, lest others get ahead of him and thus reduce his happiness. Only when people learn to be free from such obsessions will they enjoy the freedom of mind and the happiness associated with it.

It is in this sense and for these reasons that "only spirituality and a sense of purpose bring bliss" as Stephen Joseph (1999) found. Joseph's study seeks a recipe for happiness. He found that material success, wealth, and possessions could undermine happiness, and that religions of all stripes, including spiritual pursuit outside of traditional religions, could make a person happier. Through "education" or "religion," or whatever name it is called, freeing humanity from the Benthamite obsession about physical utility and the "felicific calculus" may paradoxically make the Benthamite dream of greatest happiness for the greatest number closer to reality.

## Notes

- 1 Rand, Ayn (1957) *Atlas Shrugged*, 35<sup>th</sup> Anniversary Edition, New York: Signet, p. 939. Rand, Ayn (1984), *For the New Intellectual*, New York: Signet, Reissue edition, p. 131.
- 2 This chapter defines happiness as a desirable human condition and is synonymous with "subjective well-being." As such people with different values may achieve happiness through pursuing different goals. By this definition, all human beings knowingly or unknowingly pursue after happiness, even though some people, like Friedrich Nietzsche, openly denies happiness as a desirable goal.
- 3 Those who think money is important tend to be less happy, according to the correlation coefficient. When the "importance of money" interacts

- with “higher income,” the negative correlation coefficient turns statistically significant, showing that higher income people who think money is important tend to be less happy than those who think money is not that important.
- 4 His works, such as *Hope Through Heartsongs* (2002, Hyperion) have been lauded on ABC, C-SPAN, Oprah, and the New York Times best-seller list.
  - 5 “Bentham’s utilitarianism is hedonistic. Although he describes the good not only as pleasure, but also as happiness, benefit, advantage, etc., he treats these concepts as more or less synonymous, and seems to think of them as reducible to pleasure”. *The Penguin Dictionary of Philosophy* ed. Thomas Mautner.
  - 6 Rand is a controversial writer. But her concept of happiness does correspond to much of what I am talking about here. See *The Value of Selflessness*, p. 28.
  - 7 Another example is discussed in Harbaugh (2003), who discussed how the fear of being regarded inept (a mental bad) and how the desire to be seen competent may affect behavior.
  - 8 Kelvin Lancaster and Gary Becker show us that market goods and services are merely inputs that work with the consumers’ time and even effort to produce the attributes that count in a (utilitarian) utility function. These attributes, like taste, comfort, beautiful sights and soothing sounds, are generally physical, physiological, or sensory in nature.
  - 9 This “veil of ignorance” test, otherwise called the impartiality test, was first proposed by Harsanyi (1953, 1957), as pointed out by Yew-Kwang Ng.
  - 10 Consider the first verse in Song of the Truthful Mind (Xin Xin Ming) from the Third Zen Buddhist Patriarch Seng Can: “The way of the supreme is not difficult if only people will give up preferences. Like not, dislike not. Be illuminated”.

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# 4

## Internal and External Determinants of Subjective Well-Being: Review and Policy Implications

*Ulrich Schimmack*

Starting in the 1970s, political scientists have challenged the common practice to rely exclusively on economic indicators (e.g., GDP) to measure progress and development (Andrews and Withey 1976; Campbell, Converse & Rodgers 1976; Cantril 1965; Michalos 1985). One problem of the reliance on purely economic indicators is that increased economic progress does not guarantee greater well-being. For example, at the moment many people in developed countries are concerned that outsourcing and globalization decrease their subjective well-being even though it may increase their countries' GDP. Social indicators that assess people's subjective well-being addresses this limitation of economic indicators. In recent years, public policy makers have recognized the importance of subjective indicators of well-being for public policy decisions (Bönke 2005). As noted by Bönke (2005), public policy intervention implicitly or explicitly "not only aims at increasing material living conditions, but also at improving individual well-being in a general sense." (p. 5).

This chapter discusses several issues that need to be addressed before indicators of subjective well-being can be used to guide and evaluate public policy. These issues are (a) the definition of subjective well-being, (b) the validity of subjective well-being indicators, and (c) the responsiveness of subjective well-being to environmental changes.

### **The definition of subjective well-being**

The concept of well-being implies that people's lives vary along an evaluative dimension that ranges from an extremely undesirable life (terrible) to an extremely desirable life (excellent). Like any evaluation, evaluations of people's lives require an assessment of what the life of

an individual is actually like (e.g., married, employed, living in a small town, has many friends) and a comparison of a life's actual aspects to the ideal life (e.g., being married, employed, living in a small town, and having many friends).

It is useful to distinguish three major approaches to the assessment of well-being that differ fundamentally in the way lives are evaluated. The first approach specifies a number of basic and universal needs and assesses to which extent an individual's life meets these needs. The list of needs may include basic needs such as food and shelter or more advanced needs such as the need for social relationships and belonging (Baumeister & Leary 1995), autonomy (Deci & Ryan 1985), and meaning (Peterson, Park & Seligman 2005). A critical examination of this approach from a philosophical/normative perspective reveals some shortcomings of this approach (Sumner 1996). For example, non-basic needs and values vary across individuals and cultures (Inglehart 1997; Oishi, Schimmack, Diener & Suh 1998; Oishi, Hahn, Schimmack, Radhakrishnan, Dzokoto & Ahadi 2005; Schwartz 1992). Thus, the same level of fulfillment of a need may reflect different levels of well-being because fulfillment of a less important need has a weaker effect on well-being (Brunstein 1993; Diener & Fujita 1995; Michalos 1985). A more sensible approach would therefore require different lists of needs for different individuals or individuals would have to give different weights to different needs (Tiberius 2004). However, even a predefined list of needs may fail to capture aspects that are relevant to an individual's well-being, and the risk is that an existing measure captures needs that are deemed important by the researcher rather than by the respondent (Tiberius 2004).

The second approach defines and measures well-being in terms of people's hedonic experiences (Kahneman 1999). This approach has a long history in the philosophical tradition of hedonism (Bentham 1948). Many contemporary philosophers have rejected hedonism as a theory of well-being (cf. Sumner 1996). Sumner (1996) lists several reasons for the decline of hedonistic theories of well-being in philosophy. One problem of hedonism is the unresolved questions about the nature of hedonic experiences. Hedonism assumes that all experiences share a homogeneous feeling tone that makes all experiences comparable in terms of their hedonic quality. This view of hedonic experience is expressed in Kahneman's (1999) notion of instant utility, which is the result of a continuous evaluation of one's environment. With increasing instant utility, experiences become more pleasant and with decreasing instant utility, experiences become more unpleasant.

Viewed this way, hedonic experiences provide a common metric that make all experiences comparable. A pleasant experience based on the instant utility of eating vanilla ice cream leads to higher well-being if this experience is more pleasant than another experience regardless of whether this experience is based on eating chocolate ice cream, winning a contest, or getting a phone call from a friend.

One problem with this account is that the existence of a common feeling of pleasantness or unpleasantness can be questioned. For example, although some emotion researchers argue that emotions can be reduced to a hedonic core (e.g., Ortony, Clore & Collins 1988), others argue for the existence of distinct emotions (Oatley & Johnston-Laird 1987). In the latter case, it would be difficult to compare instant utility across qualitatively distinct experiences. That is, does a moderately intense experience of anger have a stronger or weaker effect on well-being than a moderately intense experience of sadness (see, e.g., Frijda, Ortony, Sonnemans & Clore 1992)? Furthermore, it is by no means clear that the appraisal of instant utility produces only a single affective experience. People can be in a good mood and at the same time have an unpleasant sensory experience (Schimmack 2001), or have two concurrent emotional experiences (Larsen, McGraw & Cacioppo 2001; Larsen, McGraw, Mellers & Cacioppo 2004; Schimmack & Colcombe, *in press*). In sum, a hedonic theory of well-being makes some fundamental assumptions about the nature of hedonic experiences that have not been confirmed by emotion researchers.

A more serious problem for hedonic theories of well-being is the possibility that people may choose a less pleasant experience over a more pleasant one (cf. Sumner 1996). A study by Lang, Greenwald, Bradley, and Hamm (1993) nicely illustrates this problem. In this study, participants could see emotional slides for as long as they wanted. The slides differed in their level of hedonic valence and arousal. A hedonic theory predicts that participants would watch pleasant pictures for a long time and unpleasant pictures for a short time to maximize hedonic experiences. Contrary to this prediction, viewing times were determined by arousal and participants often chose freely to look for a longer time at extremely unpleasant pictures (e.g., mutilations, accident victims). Cross-cultural research also suggests that people differ in the importance that they place on hedonic experiences (Rozin 1999; Schimmack, Radhakrishnan, Oishi, Dzokoto & Ahadi 2002; Suh, Diener, Oishi & Triandis 1998). People in individualistic cultures (e.g., the United States) place a greater emphasis on hedonic experiences in life satisfaction judgments than people in collectivistic cultures (e.g., Mexico).

This cultural difference may be related to the shift from materialistic to post-materialistic values with increasing development (Inglehart 1997). Finally, everyday examples also suggest that people are sometimes willing to forgo pleasure for the pursuit of other goals. Many major achievements and humanitarian acts (e.g., running a marathon, helping during a humanitarian crisis, caring for a baby) involve unpleasant experiences. For example, a rescue worker after a disaster may work for days and encounter dozens of dead bodies to find a single child that is alive. I think it is unlikely that the one moment of joy outweighs the days of misery in a simple summation of hedonic experiences. Nevertheless, a rescue worker may weigh the moment of joy more heavily and downplay the times of misery. In this hypothetical scenario, the hedonic balance of actual affective experiences would be a misleading indicator of the individual's sense of well-being.

Finally, hedonic theories of well-being share a common problem with other theories of well-being discussed so far. Namely, the theory imposes a common standard on all individuals. It merely replaces money or fulfillment of a particular need with the amount of pleasant over unpleasant experiences. Some people may reject this standard and evaluate their lives differently. In this sense, hedonic measures of well-being are not really subjective because they fail to give individuals the right to evaluate their lives based on their own standards. For example, an individual with a dispositional tendency to experience unpleasant moods (e.g., neuroticism) may realize that his affective balance provides negatively bias information about the actual quality of his or her life and therefore decide to evaluate his or her well-being as more favorable than his or her hedonic balance would suggest.

The third approach of measuring well-being addresses this limitation. In this approach, participants are asked to make a global evaluation of their own lives (Andrews & Whithey 1976). These evaluative judgments are commonly called life-satisfaction judgments (Diener 1984). Although the notion of satisfaction may imply that life satisfaction is also a hedonic measure, actual measures of life satisfaction do not assess people's feelings of satisfaction. Rather, they ask people to make an evaluative judgment on a scale from terrible to excellent or from highly undesirable to highly desirable. Importantly, respondents are not given a set of criteria to make these judgments. Rather, they are asked to think about the most important aspects of their lives and to evaluate them based on their own subjective standards (Diener, Emmons, Larsen & Griffin 1985). For example, one individual may think about income and judge it based on the ability to provide food

and shelter for herself and her family. Another individual may think about income and evaluate it based on a comparison to his co-workers income. A third individual may not think about income, but may think about his marital relationship. Thus, life satisfaction judgments are conceptually most appropriate to obtain a subjective evaluation of an individual's life from the perspective of the individual whose life is being judged. However, the open and global nature of these judgments raises concerns about the validity of actual life satisfaction judgments. Actual life satisfaction judgments may provide false information about individuals' well-being when respondents fail to answer life satisfaction questions according to the normative model of life satisfaction judgments. For example, individuals may fail to consider some important aspects of their lives; they may use inappropriate weights for the importance of different domains, or they may base their judgments on unimportant information. Thus, life satisfaction *judgments* may not be valid measures of well-being, even though life satisfaction is a good indicator of well-being.

In sum, there exist a variety of approaches to the measurement of well-being. From a normative perspective, the most appropriate measure are life satisfaction judgments because they completely leave the task of evaluation to the individual whose life is being evaluated. However, a more pragmatic approach recognizes that all approaches have strengths and weaknesses and can be useful complements of economic indicators. If all indicators show similar results, one can be assured that the results are valid. For example, if all measures show a negative relation with unemployment, there is strong evidence that unemployment is associated with lower well-being. However, if different measures show different results, it becomes important to examine carefully the different normative assumptions that are being made by different measures of well-being. For example, if privatization of retirement funds increases autonomy, but decreases life satisfaction, the finding may suggest that the normative assumption that more autonomy by definition increases well-being may be false.

### **The validity of life satisfaction judgments**

Validity is a technical term in the social sciences. It essentially means that a measure is accurate and measures what it is intended to measure. Just like a scale is supposed to provide an accurate measure of weight and not intelligence, and an IQ test should provide an accurate measure of intelligence not weight, a life satisfaction measure should

measure life satisfaction. While it is relatively easy to assess whether a scale provides an accurate measure of weight, it is more difficult to assess whether an IQ test is a good measure of intelligence. It may seem even more difficult to determine whether a life satisfaction measure is a valid measure of life satisfaction because life satisfaction is subjective. Due to the subjective nature of life satisfaction, it is impossible to directly confirm the validity of life satisfaction judgments. Thus, validation of life satisfaction judgments relies heavily on the indirect approach of finding evidence that disconfirms their invalidity.

One major concern about life satisfaction judgments is that people may be unwilling or unable to judge their lives according to the normative model which prescribes that they carefully select the most relevant aspects of their lives and carefully evaluate these aspects based on a careful selection of subjectively chosen standards and then rationally integrate this information into an overall judgment. Alternatively, people may rely on a simple heuristic to deal with the apparent complexity of the task. People may rely on one of two heuristics, which would both severely undermine the validity of life satisfaction judgments. They may either judge their life satisfaction based on their current mood (Schwarz & Clore 1983) or they may rely on a single aspect of their life that is particularly salient at the moment (Schwarz & Strack 1999; see Schimmack & Oishi 2005, for a review). As people's moods are highly variable from one day to another, mood effects on life satisfaction judgments would render life satisfaction judgments invalid. If Bob is in a good mood on Monday and reports high life satisfaction and Bob is in a bad mood on Tuesday and reports low life satisfaction, the judgment would tell us about Bob's mood, but not about Bob's general evaluation of his life.

The good news is that neither heuristic provides an adequate account of the process how people respond to life satisfaction questions in surveys that provide public policy makers with information about citizens' well-being (e.g., Bönke 2005). This conclusion is supported by several research findings. First, in typical assessment situations current mood has negligible effects on life satisfaction judgments (Eid & Diener 2004; Schimmack, Oishi & Diener 2002). Second, a momentarily salient life domain does not have a dominant influence on life satisfaction judgments. This has been shown in studies that manipulate the order of a life satisfaction judgment and a judgment of a particular life domain (e.g., marital satisfaction). The correlation between the global and the domain judgment does not vary substantially with the order in which the judgments are made (Schimmack & Oishi 2005). Thus, just answer-

ing a question about marital satisfaction does not lead individuals to judge life satisfaction solely on the basis of marital satisfaction. Third, the retest stability of life satisfaction judgments over a period of a few months is high. Thus, judgments appear to be based on the same information even though the mood and the situation have changed. The relevance of these threats to the validity of life satisfaction judgments for public policy decisions is further diminished by the fact that public policies are aimed at groups of individuals rather than a single individual. Averaging across respondents will typically eliminate any effects due to mood or momentarily accessible information. Finally, it is possible to take a few simple precautions to reduce the chance that life satisfaction judgments are distorted by mood or momentarily salient information. For example, it is desirable to assess life satisfaction before questions about specific life domains and it is possible to discourage participants from using their current mood to judge life satisfaction (Schimmack, Diener *et al.* 2002).

The evidence reviewed above is necessary but not sufficient to demonstrate the validity of life satisfaction judgments. For example, people may report the same level of life satisfaction across situations and time because they always respond in a social desirable manner or answer consistently, but not in accordance with the normative model. Schimmack and Oishi (2005) examined the relation between global life satisfaction judgments and a judgment task that simulates the normative model. In this task, respondents first listed the five most important aspects of their lives. They then rated how satisfied they were with each of these five aspects. In accordance with the normative model of life satisfaction, this task lets respondents choose the aspects that define their lives and respondents can evaluate them according to their own standards. The study revealed a fairly strong correlation ( $r = .70$ ) between the typical global judgments of life satisfaction and the normative judgment task. Furthermore, the order of the two types of judgments had a negligible effect on the correlation. A content analysis of the listed life domains showed that the respondents, who were students, frequently mentioned aspects that are important in students' lives such as academic achievements, family relationships, friendships, and romantic relationships. Thus, the high correlation cannot be attributed to a deviation from the normative model on both tasks.

One possible reason for the high correlation between the two measures of life satisfaction could be response styles. If some people prefer to use extreme scores and others avoid using extreme scores, mere individual differences in the use of the response scale will inflate the

correlation between the two tasks in the previously reviewed study. Schimmack and Oishi (2005) addressed this concern by examining the correlation between global life satisfaction judgments and important life domains (e.g., family relationships) and unimportant life domains (e.g., weather). Response styles should produce a correlation independently of the importance of a domain, whereas the normative model of life satisfaction predicts stronger correlations between life satisfaction judgments and important domains than unimportant domains. A study that manipulated the importance of domains confirmed the prediction of the normative model (see also Schimmack, Diener *et al.* 2002). Thus, response styles have a negligible influence on life satisfaction judgments. Furthermore, even minor effects of individual differences in response styles have no effect on averages across individuals, which are typically of interest in a public policy context (response styles that are shared by a group of individuals are examined below). One limitation of existing life satisfaction measures is the exclusive reliance on positively scored items ("I am satisfied with my life"). Schimmack, Oishi and Diener (2006) are currently addressing this concern by developing a life satisfaction measure with reversed items ("I am dissatisfied with my life"). Preliminary results show that positive and negative items are highly negatively correlated and form a single factor. This finding suggests that the lack of reverse scored items on existing measures is not a threat to the validity of these life satisfaction judgments.

Another threat to the validity of life satisfaction judgments is social desirable responding. People may feel uncomfortable to reveal that they are dissatisfied with their lives. They may even use various strategies or defense mechanisms to distort their own perceptions of their life satisfaction (Paulhus 1984). Social desirable responding may account for some of the discrepancies between self-reports and informant reports. However, it has been difficult to separate social desirable responses from valid responses of high life satisfaction in studies of individual differences. In contrast, it has been easier to document some influence of social desirable responding across different survey methods. As noted by Joar Vittersø (personal communication, October 2005), the percentage of very happy people in Norway has been consistently between 19 and 23% in ten national surveys over the past 30 years that used paper-pencil tests. Using the same question, face-to-face interviews obtained a percentage of 30 on the same item. This finding suggests that truly anonymous measures are more valid because they minimize the problem of social desirable responding. However, not all studies show effects of the assessment method (see Diener & Suh

1999). Furthermore, these effects would not influence comparisons of surveys that use the same assessment strategy. For example, it would still be possible to show that a public policy intervention produced an increase in life satisfaction in a pre-post comparison of two face-to-face assessments.

So far, the assessment of validity has been based solely on self-report data. These findings can demonstrate internal validity; that is, life satisfaction judgments relate to other responses by the same individual in a manner that is consistent with the normative model of life satisfaction. However, internal validity is not sufficient to demonstrate that life satisfaction judgments are valid indicators of life satisfaction. If life satisfaction judgments are valid, they should also reveal external validity; that is meaningful relations to measures that are not based on responses by the same person. It is unsatisfactory to argue that life satisfaction judgments are by definition valid measures of life satisfaction because life satisfaction is subjective. At the same time, the subjective nature of life satisfaction makes it more difficult to examine the external validity of life satisfaction judgments because low correlations between an external variable (e.g., income) and a life satisfaction judgment may be due to the fact that life satisfaction is not related to an external variable.

The most widely accepted and most appropriate external validation criterion for life satisfaction judgments are judgments by knowledgeable informants. Knowledgeable informants are likely to have at least limited access to information that allows them to judge another individual's life satisfaction. This information can be based on verbal cues (e.g., a husband complains about work) or non-verbal cues (e.g., a daughter is cheerful and upbeat in her expressions). At the same time, it is reasonable to assume that informants' knowledge about an individual's life satisfaction is limited. For example, informants may not know the weights that an individual attaches to different life domains. Thus, correlations between self-ratings and informant ratings are likely to underestimate the validity of self-reported life satisfaction. A review by Pavot and Diener (1993) shows that correlations between self-ratings and informant ratings typically range from .40 to .50. Under the assumption that both measures are a combination of the true level of life satisfaction and measurement error, this finding suggests that at least 40% of the variance in self-reported life satisfaction is valid. The discrepancy between self-reports and informant reports provides an important avenue for future research to increase the validity of self-report measures of life satisfaction.

Further evidence for the external validity of life satisfaction judgments is provided below when I review the evidence regarding internal and external determinants of life satisfaction. Any finding that shows that life satisfaction judgments are systematically related to internal and external causes implies that the measure was valid because an invalid measure would fail to show systematic and theoretically predicted relationships with other variables.

### **Determinants of life satisfaction**

It is important to distinguish between internal and external determinants of life satisfaction. Internal determinants are factors within an individual that cause him or her to have a particular level of life satisfaction independent of an individual's environment. External determinants are factors within an individual's environment that influence the individual's well-being. The distinction between internal and external determinants is particularly relevant for the use of life satisfaction judgments by public policy makers because public policies typically focus on interventions that change people's environments (e.g., increase taxes, providing health care, etc.). To the extent that life satisfaction is determined by internal factors, public policy makers may be unable to increase citizens' well-being. Even if it were possible for public policy makers to influence internal determinants of life satisfaction, these interventions would raise serious practical and ethical concerns. For example, a disposition to experience depressed moods is associated with lower life satisfaction (Schimmack, Oishi, Furr & Funder 2004). Furthermore, it has been shown that negative mood states can be reduced by means of drugs for the treatment of clinical depression even in normal, non-depressed individuals (Knutson *et al.* 1998). Thus, public policies that would make these drugs accessible for everybody could in theory raise life satisfaction. A first objection to this intervention could be that in some cases the unpleasant mood may be a valid reflection of lower well-being (e.g., feeling sad after the loss of a loved one). In these cases, a drug-induced decrease in unpleasant feelings would not necessarily imply an increase in well-being because the lack of unpleasant feelings is not a valid reflection of the individual's life circumstances (Sumner 1996). Thus the administration of drugs or other interventions that merely enhance people's feelings without enhancing their actual lives is not a realistic option for public policy makers. Thus, a careful assessment of the strength of these factors is important to formulate realistic goals for the effects of public policy on citizens' well-being.

## **Internal determinants of life satisfaction**

Internal causes produce individual differences in life satisfaction in the absence of variability in life circumstances. For example, two individuals with the same income may have different levels of income satisfaction. Internal determinants can also produce the same level of life satisfaction in individuals with different life circumstances. For example, two individuals with different levels of income may have the same level of satisfaction with income. It is also possible to distinguish proximal and distal internal determinants of life satisfaction. Proximal internal determinants can be adaptation processes (e.g., ideal income increase with actual income) whereas distal processes can be genetic factors (e.g., a genetic disposition to experience unpleasant moods).

Psychological research over the past thirty years revealed strong effects of internal determinants of life satisfaction. In a widely cited article, Lykken and Tellegen (1996) even proposed that trying to raise life satisfaction is as futile as trying to be taller. A review article by Diener, Suh, Lucas, and Smith (1999) concluded that the evidence for internal determinants of life satisfaction is much stronger than the evidence for external determinants of life satisfaction.

Evidence regarding distal internal determinants of life satisfaction stems largely from twin studies. In adoption-twin studies, any similarity between twins raised apart must be due to their shared genes (an internal determinant) as they grew up in different environments. In non-adoption studies it is more difficult to separate environmental (external) and genetic (internal) determinants of life satisfaction, but greater similarity between monozygotic than dizygotic twins suggests a genetic contribution. Few studies have examined the genetic contribution to pure measures of life satisfaction. More studies have examined the genetic contribution to personality variables that predict life satisfaction (e.g., extraversion, neuroticism), but the results are fairly consistent across different measures. In general, about 40% of the individual differences in well-being are due to genetic variability (Lykken & Tellegen 1996; Roysamb, Harris, Magnus, Vitterso & Tambs 2002). Moreover, these studies also suggest that growing-up in the same household has virtually no effect on life satisfaction later in life.

An estimate of 40% genetic contribution seems to suggest that the remaining 60% of the variance is due to environmental factors. However, this is likely an overestimation of the importance of external factors because it assumes that life satisfaction judgments are 100% valid. In other domains, such as the measurement of personality, the

genetic contribution increases from 40% to 70% in studies that use multiple methods (e.g., self-ratings and informant ratings) to eliminate systematic measurement error in self-ratings (Rieman, Angleitner & Strelau 1997). Thus, the heritability of life satisfaction is likely to be greater than 40% as well.

It is important to avoid misinterpretations of high heritability estimates as evidence that environmental factors are not important. One problem of heritability estimates is that they can only reflect how much variability within a population (typically individuals in a specific culture during a specific historic period) is due to genetic versus environmental factors. As a result, heritability estimates fail to consider environmental factors that produce variability across cultures and historic periods (reviewed below). To illustrate this fact, it is interesting to note that various characteristics such as height, body mass index, and intelligence have heritability estimates of 70% or higher. At the same time, all three measures have shown increases over time (Flynn 1987; Freedman *et al.* 2002). As historic changes over short periods of time within a population cannot be attributed to genetic factors, these increases suggest that it is still possible to raise well-being even if heritability is very high.

In sum, there is strong evidence that genetic factors contribute to individual differences in life satisfaction. This finding provides some external validity to measures of life satisfaction. At the same time, the finding suggests that some determinants of life satisfaction are not under the control of public policy makers. However, the evidence does not support the claim that genetic determinants are so strong that public policies are unable to raise life satisfaction.

Another important internal determinant of life satisfaction is revealed in studies that show adaptation to changing life circumstances. While adaptation to negative changes in life circumstances is beneficial and helps people to maintain life satisfaction during times of adversity, adaptation to positive changes in life circumstances may undermine positive effects of public policies. There is strong evidence that the effects of single life events (e.g., car accident, buying a car, achieving a particular goal, failure on a particular task) on life satisfaction are short-lived and do not last more than a few months (Suh, Diener & Fujita 1996). Thus, a single tax-refund or even international events like the SARS crisis are unlikely to have lasting effects on life satisfaction.

More controversially, adaptation theory suggests that people's sense of well-being adjusts to long-term changes in objective life circumstances (see Frederick & Loewenstein 1999, for a review). For example,

a widely cited study by Brickman, Coates, and Janoff-Bulman (1978) showed an unexpectedly small difference between a group of quadriplegics and paraplegics and a normal control group only a few months after the former group's life changed dramatically. This process of habituation may counteract public policy interventions that produce actual improvements in the short-term.

Internal determinants of life satisfaction such as genetic dispositions and habituation may explain why life satisfaction in many countries has remained quite stable since the first assessment of life satisfaction in these countries (Hellevik 2003), although a slight positive trend can be detected in several countries (Hagerty & Veenhoven 2003; Veenhoven, this volume). Adaptation processes provide a serious challenge to the aim of public policy makers to increase well-being. The subsequent review of research on external determinants of life satisfaction addresses this concern. It shows that people do not adapt to all life circumstances and provides insights into some of the determinants of life satisfaction that are in principle under the control of public policy makers.

### **External determinants of life satisfaction**

The strongest evidence for external determinants of life satisfaction stems from cross-cultural comparisons of life satisfaction (Diener & Diener 1995; Fahey & Emer 2004). Cross-cultural studies not only show large differences in life satisfaction across nations. These differences are also remarkably stable across different surveys and over time (Veenhoven, this volume). In addition, national differences in life satisfaction are meaningfully related to desirable characteristics of nations such as wealth, freedom, observance of human rights, good education and health (Diener & Diener 1995).

Researchers disagree about the exact relationship between wealth and life satisfaction. Some researchers argue that wealth increases life satisfaction only up to a certain point after which further increases in wealth no longer contribute to life satisfaction. This theory, however, is inconsistent with the observation that eight of the ten richest nations are also among the ten happiest nations (Canada, Iceland, Ireland, Denmark, Luxembourg, Norway, Switzerland, USA). The exceptions are Austria and Hong Kong, which are among the ten richest but not happiest "nations", and the Netherlands and Sweden, which are among the ten happiest nations, but not among the ten richest nations. Even among the nations with a PPP of over 25,000 in 2004, there is still a positive correlation between wealth and life satisfaction.

Due to the high correlation between wealth and other desirable characteristics it has also been difficult to determine which of these variables is the actual cause of higher life satisfaction (assuming that cultural characteristics cause life satisfaction). Nevertheless, the findings strongly suggest that life satisfaction is influenced by external factors of the social and economic environment.

To the extent that national differences in life satisfaction merely mirror national differences in objective indicators of nations' development, these findings suggest that it is unnecessary to complement traditional indicators of well-being with subjective indicators such as life satisfaction. However, the fact that national differences in objective well-being account only for some of the variance in life satisfaction, suggests that subjective indicators are important for one of two reasons. First, economic indicators of wealth such as PPP are imperfect measures of individuals' wealth for various reasons (e.g., Diener & Tov, *in press*). For example, GDP can be divided into companies, governments, and household's wealth (or debt). In Japan, GDP has increased due to company profits, whereas government's and households' wealth have decreased. This may explain why Japanese citizens are less satisfied than Japan's total GDP predicts because company profits are unlikely to translate into greater well-being of citizens. The second reason for the value of subjective indicators is that economic indicators may not track external determinants of life satisfaction that do not involve monetary transactions (e.g., volunteer work, free access to information on the web; the pleasure of sharing a meal rather than eating two meals separately).

One of the most powerful demonstrations of the influence of cultural change on life satisfaction is a notable increase in life satisfaction in the former German Democratic Republic (Eastern Germany) after unification with the Federal Republic of Germany (Frijters, Haisken-Denew & Shields 2004). A closer analysis suggests that wealth made a substantial contribution to this increase, but other factors not reflected in GDP also contributed.

In sum, national differences in life satisfaction provide strong evidence for the influence of external determinants on life satisfaction. Furthermore, the evidence that national differences in life satisfaction are highly correlated with nations' desirable characteristics such as wealth, freedom, and observance of human rights, supports the validity of life satisfaction judgments and points towards public policies that can raise life satisfaction, especially in nations with low levels of life satisfaction. At the same time, the discrepancy between economic

indicators and life satisfaction suggests that life satisfaction measures can play an important role to reveal biases in the economic indicators and to point to additional environmental factors that influence life satisfaction.

Another well-documented external determinant of life satisfaction is unemployment (Bönke 2005; Lucas, Clark, Georgellis & Diener 2004; Gallie & Russell 1998). Importantly, longitudinal evidence demonstrates that this relation reflects a causal influence of unemployment on life satisfaction. Lucas *et al.* (2004) showed in a prospective panel study that a change in employment status produced a change in life satisfaction. Specifically, life satisfaction decreased sharply when participants' were laid off. Also consistent with adaptation theory, life satisfaction increased again even when people remained unemployed, but it did not return to individual's original level of life satisfaction. Another important finding in this study was that the effect of unemployment on life satisfaction remained even after taking changes in income into account. Thus, it seems that other aspects of unemployment (e.g., a feeling of worthlessness) are important determinants of life satisfaction. These findings have straightforward policy implications. Although many governments are aware of the problems of unemployment and try to reduce unemployment, the finding that unemployment has scientifically documented effects on people's sense of well-being gives this policy goal additional urgency.

The search for additional external determinants of life satisfaction has been disappointing so far (Diener *et al.* 1999). The reason for this may be the complexity and diversity of determinants of individual's life satisfaction. For some people, the availability of museums and theatres may be very important for their life satisfaction; for many others it is not. People with children will care about child-care facilities, playgrounds, and the quality of schools; others will not be affected. Thus, any single environmental factor is likely to make a small contribution to the life satisfaction of large groups or whole nations. This does not mean, however, that environmental factors are not important or that public policy initiatives are futile. Nevertheless, it is discouraging to search for external determinants of life satisfaction with the lingering doubt in one's mind that most of the environmental effects are idiosyncratic random events with short-lived effects on life satisfaction (e.g., a loved-one dies; getting an unexpected salary raise). The large estimate of environmental effects in twin studies provides only weak support for the importance of environmental factors because this estimate is inflated to an unknown extent by measurement error.

Subsequently, I review two lines of evidence that suggest that external determinants of life satisfaction are important and that a closer study of the processes by which environmental factors influence life satisfaction is a fruitful avenue for future research.

The first evidence is based on studies that track the longitudinal stability of life satisfaction. Fujita and Diener (2005) examined the stability of life satisfaction in the German panel study reviewed above (Lucas *et al.* 2004). They found that stability decreased from  $r = .55$  over a one-year interval to  $r = .23$  over 16 years. These correlations underestimate stability because they are based on a single-item measure. Adjusted for an estimated reliability of .7 (Schimmack & Oishi 2005), the true stabilities may be .79 over one year and .33 over 16 years. A meta-analysis by Schimmack and Oishi (2005) showed that multiple item scales indeed have a higher short-term stability ( $\sim .70$  over 1 year) and decrease to a level of about .30. This information provides information about the contribution of environmental factors to life satisfaction, if one can make assumptions about the contribution of internal and external determinants to stability and change in life satisfaction. Longitudinal behavioral genetics studies suggest that in adulthood genes contribute nearly exclusively to stability and often have no effect on change. In other words, the same genes have the same effect over the course of adulthood. As a result, environmental factors account for all of the systematic change in life satisfaction. Based on these assumptions, we would estimate that genetic factors account for the 30 to 40% of the variance that is stable over long-time intervals, which is consistent with Lykken and Tellegen's (1996) findings. However, external factors account for the remaining 30–40% of the variance that is stable in the short term, but changes in the long term; that is, the difference between the stability over 1 year and 16 years.

The finding of systematic changes in life satisfaction over time is encouraging, but does not conclusively demonstrate external determinants of life satisfaction. It is also possible that people change the way they evaluate their lives. For example, people may pay more attention to health when they grow older. Future longitudinal studies need to uncover how much actual changes in people's environment (e.g., unemployment) account for these changes, and how much they are due to changing internal determinants. Moreover, complex interactions between internal and external factors can also contribute to these changes (Diener *et al.* 1999).

Schimmack, Pinkus, and Lockwood (2006) proposed another approach to examine the contribution of external determinants to life

satisfaction by examining the similarity in life satisfaction between individuals who share a common environment. Similarity in life satisfaction provides important information about environmental determinants of life satisfaction. If, for example, individuals who share the same environment are not more similar to each other in life satisfaction than individuals from different environments, one can be fairly confident that the environmental differences have no effect on life satisfaction. On the other hand, similarity suggests that the environment makes a contribution, although one has to carefully rule out alternative explanations. A concrete example of this logic is the previously reviewed evidence about national differences in life satisfaction. The fact that the mean level of life satisfaction in one nation is different from the mean level of life satisfaction in another nation implies that individuals from the same nation are more similar in life satisfaction than individuals from two different nations. The same logic is also used in behavioral genetics studies. Here the evidence that MZ twins reared together in the same environment are not more similar than MZ twins reared in different environments is directly taken as evidence that the environment had no effect on twins' well-being (Lykken & Tellegen 1996). Schimmack *et al.* (2005) examined similarity in life satisfaction of married couples. The advantage of married couples over other dyads (e.g., siblings, parent-child) is that spouses are not genetically related. Thus, the predicted similarity on the basis of spouses' genetic relatedness is zero. At the same time, spouses share a highly similar environment and mutually shape each other's social environment. Thus, spouses should have similar levels of life satisfaction if environmental factors contribute to life satisfaction.

The most impressive data on spousal similarity in life satisfaction were obtained from a study of over 15,000 married couples (Tambs & Moum 1992). Participants completed a five-item measure of life satisfaction. The measure had a retest stability of .68 over an average time interval of two years. This study obtained a correlation of  $r = .37$  between husbands' and wives' life satisfaction. Subsequent studies have reported similar or even higher correlations (Kurdek 1997; Schimmack *et al.* 2005). Thus, there is strong evidence for spousal similarity in life satisfaction. Unfortunately, spousal similarity in life satisfaction does not provide a direct estimate of the magnitude of environmental effects on life satisfaction because different causal processes can lead to spousal similarity in life satisfaction.

Schimmack *et al.* (2005) examined the contribution of marital quality to life satisfaction. Marital quality was assessed by means of a

latent factor based on husbands' and wives' reports of relationship closeness (e.g., "My partner and I are very close"). The assumption of this modeling approach is that spouses' agreement in judgments about their marital relationship reflects the actual quality of the relationship. Relationship quality predicted 19% of the variance in life satisfaction. One alternative explanation for this finding could be that internal factors cause relationship quality and in turn life satisfaction. Several findings render this explanation unlikely. Heller, Watson, and Hies (2004) demonstrated in a meta-analysis that marital satisfaction predicted life satisfaction above and beyond the influence of personality traits such as neuroticism and extraversion. Lucas, Clark, Georgellis & Diener (2003) examined the influence of marriage on life satisfaction in a prospective panel study. Although marriage had no main effect on life satisfaction (after a two-year honeymoon period), it set individuals on different trajectories with lasting changes in life satisfaction. Whereas some individuals' life satisfaction increased, the life satisfaction of others decreased. These changes in life satisfaction over time cannot be attributed to internal determinants of life satisfaction. Furthermore, Pinkus, Schimmack & Lockwood (2006) found in a follow-up study of their married couples that changes in life satisfaction of one spouse predicted similar changes in the other spouse's life satisfaction. Further evidence stems from a behavioral genetics study of marital satisfaction (Spotts, Neiderhiser, Towers, Hansson, Lichtenstein, Cederblad, Pederson & Reiss 2004). The study showed that wife's genes contribute to wives' and husbands' marital satisfaction (and therewith to spousal similarity in marital satisfaction), but environmental factors made a substantial contribution to spousal similarity in marital satisfaction. Future research needs to uncover the nature of the environmental factors that are underlying these findings. These findings may point to public policy interventions that influence life satisfaction of married individuals via relationship quality.

## **Conclusion**

Over the past decades, the social sciences have made tremendous progress in the scientific study of well-being. Life satisfaction has been a key measure of well-being in many influential studies and there is firm evidence that life satisfaction judgments are valid, although not perfect, measures of well-being. There is firm evidence that life satisfaction is partially determined by internal factors that are difficult or impossible to change. However, there is equally strong evidence that

external factors also contribute to well-being. The evidence is particularly strong in cross-cultural comparisons, which clearly point to the limitations of adaptation. However, even in societies where most people's basic needs are met, environmental factors continue to produce individual differences in well-being. The main agenda for well-being researchers in the coming decades will be the development of causal models that elucidate the nature of these environmental factors. These models can serve as the scientific foundation for public policies aimed at increasing well-being.

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# 5

## Economics and Happiness Research: Insights from Austrian and Public Choice Economics\*

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### 1 Introduction

Over the past decade economists have increasingly focused on the implications of happiness, also known as subjective well-being, for economic theory and policy.<sup>1</sup> The focus on happiness can be seen as part of the larger behavioral movement in economics. To understand the growth and impact of this area of research, consider that the 2002 Nobel Prize in economics was awarded to a psychologist, Daniel Kahneman, “for having integrated insights from psychological research into economic science, especially concerning human judgment and decision making under uncertainty.”<sup>2</sup> The main focus of the happiness and economics research has been on understanding the interconnection between economic outcomes and the resulting happiness of economic actors. The work in this area has yielded many implications for policy in a number of areas including public finance (government expenditure and taxation), welfare policy and labor law.

Our goal in this chapter is to analyze the economics and happiness research program through the lens of Austrian and Public Choice economics. Specifically, using the tools provided by these schools of thought, we critically analyze the underlying assumptions and resulting policy implications of happiness and economics research. It is our contention that the insights of the Austrian and Public Choice schools have been largely neglected in this research. Our aim is to begin to fill this gap. We do not assume any detailed knowledge of Austrian and Public Choice economics on the part of the reader. Instead, we will briefly provide an overview of the main tenets of these schools of thought before moving on.

The Austrian School of economics was founded in 1871 with the publication of Carl Menger's *Principles of Economics*. Menger was one of the three co-developers of the marginalist revolution in economic analysis. For the purposes of our analysis, consider the following propositions that serve as part of the core of the Austrian school:<sup>3</sup>

1. Only individuals choose: Man, with his purposes and plans, is the beginning of all economic analysis. Only individuals make choices, collective entities do not choose. There are no economic phenomena unconnected to the choices of individuals. It is a felt uneasiness by the individual at any point in time which generates action to take steps to remove that uneasiness.
2. Utility and costs are subjective: All economic phenomena are filtered through the human mind. Objective realities of the world matter, but as far as in the realms of value and price they only matter in relation to individual perception of them.
3. The competitive market is a process of entrepreneurial discovery: The entrepreneur is the catalyst of change in the economic process. He is alert to unrecognized opportunities for mutual gain and exploits those opportunities in order to earn a profit.
4. Social institutions often are the result of human action, but not of human design: Many of the important institutions and practices are the result not of direct design, but the by-product of our striving to achieve another goal. Nobody intends to create the complex array of exchanges and price signals that constitute a market economy. Their intention is simply to improve their own lot in life. But their behavior results in the market system that enables them and millions of others to pursue their intention of improving their lot in life.
5. Dispersed knowledge and unintended consequences: Local knowledge of "time and place" is dispersed throughout society. No single individual, or group of individuals, can possess the relevant knowledge to successfully plan the economy. Given this dispersed knowledge, government agents suffer from a "knowledge problem." Interventions in the economy are based on limited information possessed by the government agents. As such, interventions may generate unintended consequences that could not have possibly been known prior to the intervention. These unintended consequences may render the intervention ineffective or generate a new set of problems.

Public Choice economics emerged in the 1950s out of the study of taxation and public spending. The founding father of Public Choice, James M. Buchanan, was awarded the Nobel Prize in economics in

1986. We will apply the following propositions, generated from this school of thought, in our analysis:<sup>4</sup>

1. Symmetry of assumptions: Public Choice employs the same principles that economists use to analyze people's actions in the private sphere and applies them to actions in the public sphere. For instance, economists assume that private actors are motivated by self-interest. Public Choice emphasizes that economists should apply the same assumptions to public actors. Like private actors, public actors pursue their self-interest whether that means catering to voters, interest groups or bureaucrats.
2. Rational ignorance: Public Choice theory highlights the incentives that voters face in making their voting decisions. In one of the original contributions to public choice theory, Anthony Downs (1957) highlighted that the individual voter is largely ignorant and is rational in remaining in this ignorant state. The logic behind this claim is that an individual's vote rarely decides the outcome of an election. As such, the impact of casting a well-informed vote is close to, if not, zero. The interaction in democratic politics is characterized by rationally ignorant voters, specially interested voters and vote-seeking politicians. Given this, the bias is for politicians to concentrate benefits on the well-organized, well-informed special interest voters and to disperse the costs on the unorganized and ill-informed mass of voters.

Taken together, these propositions form the basis of our analysis. We proceed in the following manner. Section 2 provides an overview of the relevant literature in the economics and happiness research program. We seek to highlight the major developments as well as the current state of the research. Section 3 provides a critical analysis of the existing research through an Austrian/Public Choice lens. Specifically, we employ the propositions outlined above to critically analyze the core assumptions and resulting policy implications of the research area of economics and happiness. Section 4 concludes with the policy implications of our analysis.

## **2 Happiness and economics: an overview of the research program**

Although psychologists have been studying subjective well-being for decades, the focus on this area by economists is relatively new.<sup>5</sup> Over the past decade, some social scientists have begun to reconsider the

strict rationality assumption that underpins economic theory (see Kahneman 1994). The work done in the area of subjective well-being has been the main means of engaging in this reassessment.

Most consider Richard Easterlin's study (1974) to be the first case of an economist considering the connection between happiness and economic outcomes. Easterlin formulated what became known as the "Easterlin paradox." In its simplest form, this paradox states that above a low level of income, economic growth does not improve human welfare. The explanation for this paradox was that people consider their level of wealth not in absolute terms but rather in relative terms. Because they judge their wealth relative to others, any increase in real income across individuals has little effect. Increases in welfare are not just a matter of everyone's income increasing. Instead, an individual's increase in income must be relatively higher than everyone else's in order for it to have a real effect on the welfare of the individual in question.

It was not until the 1990s that an increasing number of economists began to pay attention to the various questions and issues raised by Easterlin's study. The result has been a burgeoning literature that explores the connection between economics and happiness. Economists working in this area usually define subjective well-being or happiness by general satisfaction with life. The main tool for quantifying well-being is typically surveys. These surveys usually ask some variant of the fundamental question: "How happy are you with your life?" Other questions seek to test if people value relative or absolute incomes. These questions usually ask some variant of, "Would you rather earn \$100,000 in a world where others earn \$50,000 or would you rather earn \$100,000 in a world where others earn \$200,000?"

Researchers then compare the responses to these questions to some economic outcome in the hope of determining what factors influence the overall level of happiness and satisfaction. For instance, one outcome of this comparison has been the "progress paradox" which is that the overall standard of living has increased for individuals over time while the level of satisfaction or happiness, over that same period of time, has remained constant.<sup>6</sup> Why, researchers wonder, has the overall level of satisfaction with life remained constant while standards of living have improved on almost all margins? One explanation, related to the Easterlin paradox is grounded in the way people view or frame their position in society. Indeed much of the economics and happiness literature focuses on a "hedonic treadmill" effect where those that are relatively wealthy expect more.<sup>7</sup> As a result, increases in wealth yield disproportionately small increases in satisfaction and hap-

piness than one would expect. Just like a person on a treadmill, the pursuit of happiness requires individuals to continually work harder just to stay in the same place or, in the context of happiness, to maintain the same baseline level of satisfaction.

A symposium held in the *Economic Journal* in 1997 was a key factor in raising awareness within the economics profession of the economics and happiness research program. The papers in this symposium further explored the theoretical and empirical implications of well-being for economic theory and performance (Oswald 1997, Frank 1997, Ng 1997). In line with the Easterlin paradox, the studies in the symposium found that increases in income do increase well-being up to a specific point, but have a negligible effect after that point.

As the number of surveys, and hence data increased, so too did the number of empirical studies which attempted to mine this data and use it to further explore the connection between economics and happiness. For instance, Clark and Oswald (1994) consider how unemployment impacts subjective well-being. They conclude that experiencing unemployment is a major source of unhappiness and dissatisfaction. Indeed, unemployment reduces well-being more than any other single factor considered by the authors. In other studies, it has been found that general unemployment and inflation, even if it does not affect the individual being considered, increases unhappiness (see Di Tella *et al.* 2001).

Frey and Stutzer (2000, 2002b) analyze the effect of political institutions on happiness. They conclude that, “the extent of possibilities for direct democratic participation exerts a statistically significant, robust and sizeable effect on happiness over and above the demographic and economic determinants normally taken into account” (2002a: 12). The main implication is that government decentralization is a key mechanism for increasing political participation and hence subjective well-being.

More recently, research by Kahneman *et al.* (2004a) analyzes the allocation of time during the period of a day and attempts to classify events and activities by the satisfaction that they yield. The ranking of satisfaction associated with various events and activities in turn generates an “enjoyment scale.” The approach, termed the “Day Reconstruction Method (DRM),” requires participants to recall memories from the previous day by keeping a personal diary. Participants are asked to think of their day as a series of frames or episodes in a film. Researchers ask participants to answer specific questions about each frame or episode with the hopes of determining the satisfaction associated with each event or activity.

The authors of the DRM study found that spending relaxing time with friends, having lunch with co-workers, watching television and cooking all bring satisfaction (i.e., are all toward the high end of the enjoyment scale). In contrast, being in the presence of one's boss, working and commuting all brought dissatisfaction (i.e., are at the lower end of the enjoyment scale). The researchers also used the resulting enjoyment scale to compare various activities against each other. For instance, they determined that respondents that slept well enjoyed as much satisfaction as those that watched television while those that slept poorly enjoyed the same dissatisfaction as those who commute.

The studies discussed above serve only to highlight the research being done in this area. One should expect this area of research to continue to grow over the coming years as techniques for quantifying satisfaction are further developed. For instance Kahneman, along with other researchers, hopes to establish a US "National Well-Being Account," which would be a national index akin to the Gross Domestic Product (see Kahneman *et al.* 2004b). Instead of providing an aggregate measure of economic performance and well-being, the National Well-Being Account would provide a similar measure of well-being and satisfaction.

### **3 Austrian and public choice insights**

In this section we wish to raise some critical issues with the subjective well-being research program as well as some of the policy conclusions that have been generated from happiness and economics research. Specifically, it is our contention that the insights of the Austrian and Public Choice schools of economic thought have been neglected in happiness and economics research. The core tenets of these schools of thought offer key insights into both the research program and resulting policy conclusions.

#### **3.1 Aggregation and subjectivity of happiness**

One key issue is that it is not clear that well-being can be aggregated into a unified category that survey questions require. While individuals may know what makes them happy, expressing this in terms of a fixed category provided on a survey will by no means actually capture the notion of happiness. For instance, asking an individual if they are "more or less" happy than they were in the past does not capture the essence of what generates subjective well-being. However, such clear cut and simple categories are necessary for statistical manipulation. In

short it would appear that the surveys, which are the key source of data on well-being, trade off understanding the specifics of what actually generates well-being for the ability of researchers to utilize the data in statistical tests.

Another issue relates to the very notion of well-being, happiness or satisfaction. It is critical to realize that the notion of happiness is not static across individuals at one specific point in time. Each individual has a subjective view of what happiness entails.<sup>8</sup> Not only does happiness vary across individuals at a point in time, but also what constitutes well-being for an individual will change over time, as new opportunities, which were not part of the feasibility set in prior periods, become available. As Arnold Kling (2004) notes, "People a few hundred years ago had no idea what it was like to live with indoor plumbing, abundant food, and antibiotics." Given that respondents in the current period have never experienced life without these tangible goods, how can one meaningfully compare survey responses across time periods?

Even if survey responses did accurately capture the essence of well-being, it is unclear that the responses can successfully be compared to others in any meaningful way. Recall from the Introduction that the Austrian school emphasizes the subjective nature of value. Economic phenomena are filtered through the human mind and only have meaning in terms of the individual's perception. Because individual values are subjective, we cannot meaningfully compare them across individuals or even across time for the same individual in any objective way. Even though we may be able to compare the relative incomes of two individuals, we cannot say anything meaningful about their relative satisfaction or well-being that those individuals derive from that well-being. Indeed, all economics can meaningfully say is that the action of individual demonstrates their preference for pursuing that course of action. As Rothbard writes:

The concept of demonstrated preference is simply this: that actual choice reveals, or demonstrates, a man's preferences; that is, that his preferences are deducible from what he has chosen in action....This concept of preferences, rooted in real choices, forms the keystone of the logical structure of economic analysis... (1997: 212).

Demonstrated preference limits what the economist can say about the preferences of the individual actor. Consulting the individual's verbal or written survey response does not establish true preferences because

there is no way to decipher if that is actually what the individual values. In contrast, observing an individual who engages in concrete action illustrates to the observer that the individual undertaking the action expects, *ex ante*, to be made better off through that course of action. Whether the action has the desired effect is another question.

In sum, it is unclear that surveys can accurately capture the well-being of individuals. In the first place, they often provide fixed categories that individuals must choose from. This attempt at aggregation fails to capture the essence of what actually generates well-being. In other words, we have no reason to believe that the survey method can capture the relevant notion of happiness. Moreover, even if surveys could accurately capture well-being, it is not possible to compare relative well-being across individuals. Well-being is a subjective value that simply cannot be objectively measured or compared across individuals in any meaningful sense.<sup>9</sup>

The issues raised above pose major problems for the many studies that attempt to compare satisfaction survey responses across decades. For instance, in *The Progress Paradox*, Gregg Easterbrook (2003) attempts to explain why American living standards have risen drastically over the past several decades while happiness, as measured by survey data, have not. Likewise, Robert Frank relies on survey data across time in his *Luxury Fever* (2000).<sup>10</sup> Similar to Easterbrook, Frank attempts to explain how well-being has failed to increase at the same rate as other economic indicators such as per capita income and productivity.

At the core of Frank's argument is that individuals, in seeking relative status, place too much focus on tangible goods (i.e., house size, cars, vacations, etc.) while neglecting intangible goods (i.e., commuting time, family time, etc.). It is the (over)emphasis on accumulating tangible goods, while underemphasizing the importance of intangible goods, that leads to the underlying paradox. The main implication is that public policy should be oriented such that it raises the relative cost of obtaining tangible goods. With the relatively higher cost of tangible goods, individuals will tend to increase their consumption of intangible goods.<sup>11</sup>

To generalize the issues with these studies, depending on the time and the individuals selected, the very notion of happiness will be substantially different. In addition to each person possessing a subjective view of what they consider to be happiness, they also have a subjective perception of what others experienced in the past and what others will experience in the future. So when researchers ask respondents if their parents were better off or if their children will be better off, this is not some objective measure but a subjective perception of the past and

future. As such, comparing survey results over time does not seem to generate any meaningful insights.

While much of the economics and happiness literature focuses on framing issue – as evidenced by the emphasis on the hedonic treadmill effect whereby those that are relatively wealthy expect more – to explain differences in well-being, they neglect the fact that such framing issues will cause individual respondents to have varying understandings of what the notion of happiness entails. As the circumstances of individuals change, so too does their understanding of the notion of happiness and well-being. As Kling (2004) highlights, individuals may report on their happiness relative to the near-term past, not over the long-term past. What this means is that a respondent may compare his/her present situation to that experienced more recently – past weeks, months or years – instead of what they experienced in the long-term past – decades.

### **3.2 Can government deliver happiness?**

Happiness and economics research generates many significant policy implications. Much of the literature concludes that if the goal is to increase well-being, there is a large role for government intervention to bring about the desired end. For instance, some conclude that there is a major role for government redistribution between various income groups to close the relative gap and increase well-being. Because much of the happiness and economics research concludes that individuals view their situation relative to others, one could conclude that tax policy can play a key role in ending this competition between income groups. Likewise, following Robert Frank's (2000) study discussed in the above subsection, one could conclude that there is a role for government to play in increasing the relative cost of tangible goods through taxation. Doing so would make intangible goods relatively attractive. In this subsection, we wish to argue that there are good reasons to conclude that government cannot effectively generate interventions that achieve the desired end of increasing well-being and satisfaction.

One major issue faced by government agents is the knowledge problem. As F.A. Hayek (1945) emphasized, the economic problem facing society is not one of simply allocating given resources. Instead, the key issue is how to best secure and utilize the unique knowledge of "time and place" that is dispersed throughout society.<sup>12</sup> At any point in time an individual can only possess a small piece of the knowledge that is present in society. Hayek concluded that a market economy,

with an unhampered price system, was the best means of coordinating economic activities. Given Hayek's insight, one realizes that government interventions are based only on the limited knowledge of the government agent. As a result, it is unclear that specific policies can be designed that will have the desired effect. Indeed, interventions will generate unintended consequences that government agents, given their limited knowledge, could not have possibly anticipated.

For instance in theory, tax policy may be effective in reducing the relative income gap between income groups or in raising the relative price of tangible goods. But that policy, once implemented, may also have the unintended consequence of increasing tax evasion as well. Similarly, such a policy could lead individuals to seek alternative means of housing income and wealth to avoid the new tax. At the extreme the unintended consequences can render the original policy completely ineffective or cause more harm than good.

A related issue is that even if an ideal policy to increase happiness can be designed, it is unclear that it could be effectively implemented. As discussed earlier, rationally ignorant voters, vote-maximizing politicians and special-interest groups characterize democratic politics. In order to maximize their vote total, politicians will cater to the well-organized. The result is a concentration of benefits on the well-organized and a dispersion of the costs on the rationally ignorant, unorganized. This same logic applies to legislation aimed at increasing well-being and satisfaction. Such policies will be influenced by well-organized special interests and once enacted will look drastically different than they did in their original form. As such, even if legislation can effectively be designed it is unclear that it can be implemented. Only a benevolent dictator would have the incentive to maximize society's happiness (see Brennan and Buchanan 1985). Indeed, even if government is able to determine the "social happiness function," attempts to maximize it through government policy would fall prey to the same incentive issues faced by government attempts to maximize social welfare (Frey and Stutzer 2002c: 472).

Let us assume the best-case scenario. Assume that a social happiness function can actually be established and that the proper incentives are in place for government agents to maximize well-being and satisfaction. Even under this favorable scenario it is still unclear that the policies implemented will be effective. Recall that happiness is not a static concept. Indeed, subjective well-being will vary over time for each individual. As such, a policy implemented in Period X will be ineffective in future periods when the subjective notion of well-being changes.

As Milton Friedman pointed out a long time ago, the dynamics of change associated with the passage of time presents a timing problem for public policy. The reason this poses a problem is because a long and variable time lag exists between:

1. The need of action and the recognition of that need
2. The recognition of a problem and the design and implementation of a policy response; and
3. The implementation of the policy and the effect of the policy (Friedman 1953: 145).<sup>13</sup>

Given these lags, it is unclear that even if an effective policy can be designed and implemented that the timing will be such that it will have the desired effects.

Before moving on we wish to raise one final issue regarding government redistribution aimed at maximizing well-being. In addition to the issues raised above, it is critical to realize that the act of redistribution is not neutral. In other words, redistribution has real effects that distort the very process that generates the initial wealth. As F.A. Hayek (1976) discussed, questions of distribution are often misplaced in political economy because they assume a fixed pie that is being divided up according to rules of distribution that are judged as fair or not. Hayek's objection was not that fair divisions are not desirable. His criticism was that the rules of fair division are not neutral with regard to the incentives and information associated with production. The size of the pie being divided is a function of the way we divide the pie. Interventions aimed at redistribution shift the incentives and information faced by those engaged in the process that produces the allocation of goods being redistributed.<sup>14</sup>

In sum, there are numerous forces at work that make it extremely difficult, if not impossible, for government to effectively intervene to increase well-being. The first issue is whether happiness can be aggregated across society to obtain a social happiness function. Even if that can be done, government agents suffer from a fundamental knowledge problem that will reduce the effectiveness of policy in addition to generating unintended consequences. Furthermore, the actual process of policy implementation suffers from special-interest group manipulation and variable time lags which may very well render policy ineffective. Finally, government attempts to redistribute wealth are not neutral with respect to information and incentives. These interventions distort the incentives and information that economic agents act

upon to generate economic outcomes. As such the rules of redistribution will influence these outcomes which in turn will impact the overall distribution of wealth.

#### 4 Policy implications

Our analysis has critically considered the happiness and economics research program through an Austrian/Public Choice lens. One of our core contentions is that the notion of happiness is subjective in nature. The phrase, “one man’s garbage is another man’s treasure,” neatly captures the essence of our argument in this regard. There are many different notions of happiness that vary across individuals and across time. These different notions of happiness will lead different people to pursue different ends.

Economists often focus on the importance of wealth as an indicator of overall well-being. The materialism of economics has been criticized as narrowly focusing on only one aspect of human wants and desires. Critics argue that there are many immaterial goods that actors desire in addition to tangible, material goods. However, such criticism overlooks the fact that viewing well-being in terms of wealth is grounded in the maximization of individual happiness and satisfaction. Of course we fully realize that one cannot consume economic growth rates. Increases in growth rates and wealth are desirable precisely because they deliver other things that allow individuals to pursue ends that bring them satisfaction. As Mises indicated,

The immense majority strives after a greater and better supply of food, clothes, homes, and other material amenities. In calling a rise in the masses’ standard of living progress and improvement, economists do not espouse a mean materialism. They simply establish the fact that people are motivated by the urge to improve the material conditions of their existence. They judge policies from the point of view of the aims men want to attain. He who disdains the fall in infant mortality and the gradual disappearance of famines and plagues may cast the first stone upon the materialism of economists (1949: 193).

Most are familiar with the saying, “Money can’t buy happiness.” Indeed wealth does not buy happiness, but it does allow individuals to lead a flourishing human life. What exactly does a flourishing human life entail? Because the very notion of happiness is subjective and con-

stantly changing, it is our contention that a flourishing human life is one where the individual has the freedom to discover and pursue whatever it is that maximizes his well-being. For some a flourishing life will be characterized by a workaholic lifestyle, for others it will consist of a life dedicated to philanthropy and charity.

The important point is that across the wide range of lifestyle alternatives available to individuals, wealth makes the pursuit of happiness possible. This is due to the fact that relatively lower levels of disease, sickness and infant mortality and relatively higher levels of life expectancy, literacy and leisure characterize wealthier societies. Individuals in relatively wealthy societies are able to pursue ends that bring them happiness and satisfaction precisely because they do not have to worry about the source of their next meal or where they will find shelter. In other words, individuals in relatively wealthy societies can afford to pursue ends that yield personal well-being. Individuals can engage in leisurely activities with family and friends or participate in various associations, clubs and political associations because they have reached a level of wealth where basic concerns such as food, shelter, education and health are non-issues. In short, increasing wealth expands the feasibility set of activities available to individuals that allows them to achieve increasing levels of happiness and satisfaction.

The main implication of our analysis is that happiness is not suitable as a guidepost for public policy. In other words, public policy should not seek to maximize social happiness. Instead public policy should focus on allowing actors to maximize their individual well-being. Given that happiness is a function of subjective individual preferences, public policy should not focus on intervening to deliver happiness to individuals. Instead, it is our contention that public policy should focus on establishing the conditions of economic and social autonomy. Only when these conditions of autonomy are in place will individuals be able to discover and pursue whatever their notion of happiness may entail.

To be clear, we are not claiming that prosperity will lead to the removal of all uneasiness. Indeed, economic autonomy and wealth are not a panacea. Instead, increasing levels of wealth provides the means through which individuals can pursue the ends that they feel will maximize their well-being. This leads to another important point related to those who claim there is a paradox between increasing wealth and stable levels of reported happiness. This point is that perhaps there is no paradox at all. Most people would agree that money and material things are not the equivalent of happiness. Given this, why would we

expect to see a correlation between an increase in progress and an increase in happiness? As David Miller indicates,

We judge any economy too harshly if we ask how much it contributes to inner happiness. The case for markets is that they are an effective means of supplying many goods and services to consumers. Some consumers will find that what they buy fails to live up to their expectations, but the worst that can be said about markets is that they reinforce, rather than challenge, the psychology that brings about this result (1989: 42).<sup>15</sup>

It is not clear that the claim has ever been that prosperity will lead to the removal of all uneasiness. It is also unclear that public policy can achieve this. Instead of trying to increase well-being through direct interventions, policy should aim to create an institutional environment – political, legal and economic – that allows individuals to remove as much uneasiness as possible. Historically, the economic system that has been the most successful at maximizing the wealth of individuals is *laissez-faire* capitalism.<sup>16</sup>

## Notes

- \* We would like to thank the editors, David Prychitko, Arnold Kling and readers of *The Austrian Economists* blog for useful comments and suggestions. The financial support of the Mercatus Center is acknowledged.
- 1 Writers in this area use the terms “happiness,” “satisfaction,” and “well-being” interchangeably.
- 2 Source of quote: <http://nobelprize.org/economics/laureates/2002/index.html>
- 3 It should be noted that these propositions do not do justice to the Austrian school in its entirety. For a more detailed exposition of the various aspects of the Austrian school, see Boettke (1994). See Boettke and Leeson (2003) for a discussion of the evolution of modern Austrian economics since 1950.
- 4 For a more complete analysis of the various aspects of Public Choice theory see, Buchanan and Tullock (1962), Downs (1957) and Gwartney and Wagner (1998).
- 5 For but a few studies and literature reviews in this area by psychologists, see Argyle (1997), Diener *et al.* (1999) and Kahneman *et al.* (1999).
- 6 See Easterbrook (2003).
- 7 The “hedonic treadmill effect” was first identified by Brickman and Campbell (1971).
- 8 We recognize that happiness may have some intersubjective dimension. But is unclear that we can fully understand our capture this dimension in a way that allows us to make meaningful comparisons.
- 9 There is far from unanimous agreement on this point, see for instance Ng (1996, 1997). Ng (1996) develops an interpersonally comparable measure of happiness based on the notion of just perceivable increments. Ludwig von

Mises makes the important distinction between thymology and praxeology (1957: 264–83). Thymology deals with expectation formation in personal interactions. For instance, parents may be able to compare the values of their children and determine what would make each child happy. One can see a connection here with Adam Smith’s (1759) notion of the limits of moral sympathy. In contrast, praxeology deals with the logic of choice (mean-ends) of acting man with personal valuations taken as given. To summarize the distinction between thymology and praxeology, the former deals with the practicalities of life while the latter deals with the practicalities of economic science. For the importance of local knowledge of values, see Buchanan (1978) who explores the “moral-ethical limits” of individual behavior. Buchanan contends that state intervention aimed at fostering community has the perverse effect of increasing narrow self-interest as individuals attempt to utilize political institutions for personal gain.

- 10 See especially Chapters 5 and 6.
- 11 Along similar lines, Layard (2005) concludes that above some minimum income level, relative income is a better indicator of an individual’s reported well-being as compared to absolute income level. As such, every time an individual experiences a rise in relative income they make others unhappy. Layard concludes that this negative externality should be corrected through a Pigouvian tax.
- 12 On the important distinction between information and knowledge, see Boettke (2002). Austrians emphasize that knowledge is ever changing and is multifaceted, while information is something fixed. In other words, information is the stock of the existing known, while knowledge is the flow of new and ever expanding areas of the known. Austrians emphasize not just the proficient use of existing information, but also the discovery and use of *new* knowledge that comes into being only because of the context in which individuals find themselves acting.
- 13 It is because of these lags that Friedman argues that discretionary public policy will often be destabilizing. For this reason, he argued the case for general rules rather than discretionary policy.
- 14 For further discussion on the how government interventions impact the incentives and information throughout the economy, see Ikeda (1997).
- 15 We are grateful to David Prychitko for bringing this quote to our attention.
- 16 Research indicates that countries with policies and institutions consistent with economic freedom grow more rapidly and obtain higher levels of wealth (see Gwartney, Holcombe and Lawson 2004).

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## **Part III**

# **Area and Policy Case Studies**

# 6

## Do Cigarette Taxes Make Smokers Happier?

*Jonathan Gruber and Sendhil Mullainathan*

Economists have a well-established framework for understanding the welfare consequences of taxing goods that don't create externalities. Taxes create dead-weight loss by causing consumers to distort their consumption away from their preferred choices. This cost is weighed against the benefits of government revenue. As established in the seminal analysis of Becker and Murphy (1988), this argument applies equally well to both addictive and nonaddictive goods. The same type of revealed preference arguments that suggest that taxes reduce the welfare of consumers of nonaddictive goods can be extended to "rational addicts": agents decide to smoke by trading off the long-term costs of consumption against the immediate pleasures of consuming, all the while taking into account the addictive properties of the good in question. This model therefore suggests that the only justification for taxing addictive goods is the interpersonal externalities associated with consumption of those goods.

When debating tax policy towards addictive goods, however, policy makers often use an argument that falls outside of this framework. A classic example is smoking. Anti-smoking advocates argue that smoking is an unwanted habit, citing evidence such as the fact that eight in ten smokers expressing a desire to quit, and that the typical smoker tries to quit every eight and a half months (Gruber and Koszegi 2001).

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Thus, they argue, cigarette taxes can actually make those at risk of smoking better off. By helping them quit an unwanted habit or preventing them from starting a bad one, the distortion in behavior caused by the taxes may actually raise welfare among those who are at risk of smoking. Some anecdotal evidence supports this claim. For example, following a 70 cent tax hike in New Jersey, one resident said “he is not bitter about the tax hike. Anything that can motivate me to quit, or motivate anyone else to quit, is worth having,”<sup>1</sup>

Despite its prevalence, this argument is hard to convincingly evaluate. For example, there is wide agreement that consumption of cigarette is fairly price sensitive (Chaloupka and Warner 2001). But this fact doesn’t shed light on welfare. If tax hikes reduce consumption where the benefits to the consumer exceed the costs, then the consumer is worse off, exactly as in standard incidence models. If, on the other hand, tax hikes are reducing an “unwanted habit”, then smokers may be better off as some policy makers argue. Data on behavior alone, therefore, cannot resolve the issue.

In this paper, we propose a new approach to evaluate this important argument. We suggest using a source of data that is sometimes used in other disciplines but rarely by economists: data on self-reported happiness.<sup>2</sup> In principle, happiness is a direct welfare measure that can overcome the limitations of other approaches to welfare analysis of policies such as excise taxation. Moreover, happiness measures have been repeatedly validated as a strong correlate of well-being, using alternative psychological, physiological, and economic measures of well-being.

Practically, we use data from the General Social Survey, which since 1973 has collected data on self-reported well-being for a nationally representative sample of respondents, matched to data on the level of state cigarette excise taxes. Since states have independently changed their taxes over time, we have significant variation with which to estimate the effect of cigarette tax changes on self-reported happiness. However, looking at how these tax changes affect happiness in the state as a whole would cause problems if other factors are changing along with these taxes. We therefore examine how tax changes differentially affect the happiness of those in a state who have a propensity to smoke. This strategy in essence uses those who are not likely to be smokers as a way of controlling for other shocks contemporaneous with cigarette tax changes. It also measures the effect of the tax on those who are hypothesized to be helped by it: smokers, former smokers, and potential smokers.

Our results are striking: those with a propensity to smoke are significantly happier when excise taxes rise. To corroborate this finding, we use parallel data from Canada, a country that has seen much larger excise tax changes in the recent past, and we obtain a very similar finding. Moreover, these results are robust to a battery of specification checks in both countries. Most importantly, we find that, while cigarette taxes make those with a propensity to smoke happier, other taxes do not. The fact that these conclusions emerge so clearly in two independent data sets, with different distributions of underlying happiness indicators, is quite striking.

We then turn to trying to offer some (loose) interpretation of these results. We argue that it is hard to rationalize these findings within a rational addiction framework. Rather, they appear to be much more consistent with alternative models, such as those that feature time inconsistency in decision making.

Our paper proceeds as follows. In Part I, we discuss the use of subjective well-being indicators as a measure of welfare. In Part II, we discuss our data source and our empirical strategy. Part III presents our basic results, and Part IV presents a battery of specification checks, including results for Canada. Part V then discusses the interpretation of these findings. Part VI concludes.

## **Part I: What does happiness measure?**

Our methodology relies on using subjectively reported happiness measures in empirical work. But how much can such measures be trusted? Economists worry about the validity of such questions and to some extent the scientific evidence supports these worries (Bertrand and Mullainathan 2001). A large array of evidence has shown that subjective survey questions are prone to significant reporting error. For example, studies have found that the placement of well-being questions affects how they are answered. If they are preceded by a question, for example, that asks about dating behavior, people are more likely to report unhappiness. Beyond order choice, instantaneous mood at the time of survey is also found to have a large effect on how people answer such questions. Schwarz and Strack (1999) provide a nice survey of these effects.

Yet such results only tell us that there is measurement error in these questions. There is also measurement error in the numerous other variables that economists study. What is more relevant for our purposes is that the evidence is clear that these questions also contain significant true signal about well-being. Evidence of this kind comes

in several varieties but they all follow a similar methodology: find a more objective measure of well-being and see how well this measure correlates with the self-report. And strong positive correlations have been found for a large set of such variables. For example, outsider's assessments of a person's happiness or independent counts of smiles correlate positively with self-reported happiness. Moving to much more physiological measures, everything from heart rate, blood pressure, skin resistance measures of responses to stress, to even level of activity in the left versus right prefrontal lobe all are found to correlate with subjective reports of well-being (Kahneman 1999; Gardner and Oswald 2001). These studies all suggest that despite the measurement error inherent in this attitudinal question, it nevertheless correlates effectively with well-being.

Moreover, the small happiness literature in economics also has uncovered interesting patterns further bolstering the idea that these variables in fact measure well-being. In cross-sections, happiness generally rises with factors that economists would associate with improved well-being, such as higher incomes. The income effect appears to be causal, as it is present for lottery winners and those receiving inheritances (Gardner and Oswald 2001). Self-reported well-being is also lower for the unemployed, and for those who are divorced (Blanchflower and Oswald 2000); interestingly, however, the reduction in happiness due to unemployment is mitigated when there is a larger "reference group" of unemployed (Clark, forthcoming). Despite the increased use of this measure, there has been no attempt to date of which we are aware that uses these subjective well-being measures to draw welfare conclusions about particular tax or spending interventions. As a whole, therefore, the available evidence suggests that while subjective well-being measures do contain noise, they also contain significant signal and are a fruitful area for empirical exploration.

A more subtle concern raised in Bertrand and Mullainathan (2001) is that the measurement error in self-reported well-being may be correlated with other variables. This makes it hard to assess whether a factor is affecting happiness or simply the measurement error in happiness. But in our framework, for this to drive our results, the measurement error in happiness would have to change in specific states coincident with cigarette taxes and in such a way that it only affects those who are at most risk of smoking. It is hard to see how this could be driven by the considerations cited in Bertrand and Mullainathan (2001) as generating correlated measurement error, considerations such as cognitive dissonance and social reference effects.

## Part II: Data

Our primary data set is the General Social Survey (GSS). This is a nationally representative survey that has been administered to 1500 to 2500 households in most years since 1972; we use data from 1973 (the first year where state identifiers are available) through 1998. The GSS asks a variety of standard economics questions, but its use has mostly been in other disciplines, since the survey's main focus is on questions not traditionally used by economists: attitudes towards current events or political parties; religious devotion; and psychological measures such as happiness. It is the last measure that forms our key dependent variable. In particular, in each year the GSS asks respondents, "Taken all together, how would you say things are these days – would you say that you are very happy, pretty happy, or not too happy"?

A major advantage of the GSS for our purposes is that it has been carried out for many years. Over this long time period there have been very significant changes in the real excise tax rates charged by the states, both absolutely and relatively to each other. It is these changes that provide the identifying variation for our model. Data on state cigarette excise taxes come from the publication *The Tax Burden on Tobacco*. We use state excise tax values as of February of each year, as the GSS data were collected over the February–April period.

The first three columns of Table 6.1 show the means and standard deviations of the key variables for our analysis; we first show the means for all respondents, and then separately by smokers and nonsmokers. We use three dummy variables as our dependent variables for measuring happiness, corresponding to the three possible answers to the happiness question above. Over our entire sample, in the United States 32% of respondents report themselves to be very happy, 55% are pretty happy, and 12% are not happy.

The GSS collected data directly on smoking behavior, but only from 1977 to 1993. In those years, 35% of the US sample reports themselves as smokers, which is consistent with prevalence rates over this time period. Table 6.1 also summarizes the data sets based on whether the person reports being a smoker or a non-smoker. Smokers are somewhat less happy than non-smokers; while this consistent with the notion that they would like to quit but cannot, it is equally consistent with heterogeneity in smoking behavior by underlying happiness.

The average real (in 1999 dollars) excise tax rate on cigarettes in the U.S. is 31.6 cents, with a standard deviation of 15.8 cents. There is wide variation in excise taxes across states, over time, and within states over

Table 6.1 Summary statistics

	<i>US Data</i>			<i>Canadian Data</i>		
	<i>All</i>	<i>Smoker?</i>		<i>All</i>	<i>Smoker?</i>	
		<i>No</i>	<i>Yes</i>		<i>No</i>	<i>Yes</i>
Report "Very Happy"	0.320 (.466)	0.355 (.479)	0.277 (.448)	0.588 (.492)	0.720 (.449)	0.646 (.478)
Report "Pretty Happy" (US) or "Somewhat Happy" (Canada)	0.554 (.497)	0.543 (.498)	0.559 (.497)	0.338 (.473)	0.226 (.418)	0.281 (.450)
Report "Not Too Happy" (US) or "Unhappy" (Canada)	0.119 (.323)	0.091 (.288)	0.152 (.359)	0.050 (.217)	0.044 (.205)	0.064 (.245)
Real Tax Rate	0.316 (.158)	0.280 (.115)	0.278 (.117)	1.170 (.394)	1.227 (.494)	1.211 (.490)
Predicted Smoker	0.352 (.190)	0.298 (.171)	0.456 (.174)	0.300 (.154)	0.247 (.147)	0.365 (.148)
Smoke?	0.352 (.478)	0.000	1.000	0.276 (.447)	0.000	1.000
White	0.835 (.371)	0.844 (.363)	0.832 (.374)			
Black	0.135 (.342)	0.128 (.334)	0.144 (.351)			
Married	0.565 (.496)	0.583 (.493)	0.548 (.498)	0.552 (.497)	0.543 (.498)	0.515 (.500)
Separated or Divorced	0.145 (.353)	0.113 (.317)	0.191 (.393)	0.084 (.278)	0.066 (.249)	0.126 (.331)
Widowed	0.185 (.388)	0.179 (.384)	0.183 (.387)	0.138 (.345)	0.204 (.403)	0.117 (.321)
High School Dropout	0.265 (.441)	0.247 (.431)	0.332 (.471)	0.370 (.483)	0.389 (.488)	0.403 (.491)
High School Graduate	0.321 (.467)	0.317 (.465)	0.348 (.476)	0.150 (.357)	0.136 (.343)	0.171 (.376)
Some College	0.217 (.412)	0.213 (.410)	0.199 (.399)	0.147 (.354)	0.134 (.340)	0.152 (.359)
College Graduate	0.194 (.396)	0.220 (.414)	0.118 (.323)	0.301 (.459)	0.327 (.469)	0.265 (.441)
Full Time Worker	0.490 (.500)	0.464 (.499)	0.536 (.499)			
Part Time Worker	0.101 (.301)	0.106 (.307)	0.089 (.284)			
Unemployed	0.029 (.169)	0.019 (.138)	0.044 (.206)			

**Table 6.1** Summary statistics – *continued*

	US Data			Canadian Data		
	All	Smoker?		All	Smoker?	
		No	Yes		No	Yes
Not in Labor Force	0.344 (.475)	0.379 (.485)	0.287 (.452)			
Church Attendance Index	3.884 (2.694)	4.457 (2.676)	3.076 (2.445)			
Church Attendance 1				0.238 (.426)	0.281 (.450)	0.130 (.336)
Church Attendance 2				0.121 (.326)	0.122 (.328)	0.098 (.298)
Church Attendance 3				0.267 (.443)	0.248 (.432)	0.290 (.454)
Unemployment Rate	9.556 (2.772)	10.396 (2.626)	10.569 (2.698)	6.595 (2.113)	6.833 (1.952)	6.947 (1.994)
Number of Observations	36421	10279	5583	100663	35990	13742

*Notes:* Standard deviations in parenthesis. Columns 1–3 are for the US data and column 4–6 are for Canadian data. Columns 1 and 4 are full sample means. Columns 2 and 3, and columns 5 and 6, restrict to sample of non-smokers and smokers respectively. Smoker data is only available for a subset of the full sample in both data sets.

time; 25% of the variation in excise taxes is within states over time. This allows us to control for fixed state differences in cigarette taxes and happiness in our analysis below.

Table 6.1 also shows the means for the key control variables used in our analysis. Some interesting features are worth noting. Smokers are less educated; for example, they have a high school dropout rate of 33% compared to 25% for non-smokers. They are also more likely to be unemployed and less likely to be out of the labor force, although this likely largely reflects the fact that the smoking rate is much higher among males.

Finally, income is available only categorically in the GSS, in fine gradations until the top of the income distribution, then in larger intervals and finally a top code. In order to create a smooth income measure, we have used data from each year's Current Population Survey to impute values to each of these larger ranges and the top-coded range.

### Part III: Basic results

For our initial regression analysis, we follow the literature on the impact of taxation on smoking, simply replacing the dependent variable, traditionally smoking, with happiness. Let  $H_{ijt}$  be the happiness of individual  $i$  who lives in state  $j$  at time  $t$ , and  $T_{jt}$  be the real level of cigarette taxes in state  $j$  at time  $t$ . A simple regression that relates happiness to cigarette taxes in the state would be:

$$H_{ijt} = \alpha + \beta_j + \eta_t + \delta T_{jt} + \zeta X_{ijt} \quad (1)$$

where  $\beta_j$  are state fixed effects and  $\eta_t$  are year fixed effects. These fixed effects completely control for any fixed differences between states and between years, which means that only within-state variation in cigarette taxes is used in the estimation. We include a variety of  $X$  variables to control other determinants of happiness: five-year age category and gender interactions; household income quartile dummies; education categories (high school dropout, high school graduate, some college, and college graduate); education of the respondents mother and father (by the same categories); race (white, black, and other); marital status (married, divorced/separated, widowed, never married); dummies for number of children; dummies for full time work, part time work, unemployed, out of labor force, and whether ever worked; religious attendance (a nine value index that rises monotonically with attendance frequency); and the state/year unemployment rate.

Since we have three discrete levels of reported happiness, we simply estimate three linear probability models; the results are similar if probit models are estimated instead. In estimating all our equations, we adjust the standard error to allow for both auto-correlation and the grouped data, as suggested by Bertrand, Duflo and Mullainathan (2001). We do this by performing a White correction that allows for an arbitrary variance-covariance matrix within states.

The results of estimating a regression such as this are presented in the first three columns of Table 6.2. The results here are somewhat mixed. There is a negative effect on being very happy, a positive effect on being somewhat happy, and a negative effect on being unhappy. The last of these is the closest to significance, but none of the coefficients are large relative to their standard errors. From this series of regressions, one would conclude that there is no consistent impact of cigarette taxes on happiness.

These columns also show the coefficients on many of the regressors included in this happiness equation (we do not show the coefficients on the age/sex, state, and year controls). Blacks are less happy, as are those with children. Married persons are much happier, as are those with higher incomes. Those who are unemployed are less happy, but those who are not in the labor force are happier. Those who attend religious services more frequently are also much happier.

But this simple regression has several problems. First, if states are changing cigarette taxes at different points in their state business cycle (in a manner which is not captured by our state/year unemployment rate control), the estimated “effect” may instead reflect the effect of these economic conditions on happiness. Another potential omitted factor from this model is the state spending (or reduced other taxes) that is financed by cigarette taxation. If we find that higher cigarette taxes lead to a general rise in happiness, this could simply reflect the fact that these revenues are used in a welfare-enhancing way. Finally, not all members of the state are at risk of smoking. The arguments made by policy makers rely on helping people quit or preventing them from starting, suggesting that those who are at risk of smoking should have the largest happiness effects.

To address this problem, we follow a long-standing approach in labor economics, particularly for the evaluation of welfare programs: we contrast the impact of taxes on those likely to be affected, relative to those unlikely to be affected.<sup>3</sup> That is, we exploit the fact that cigarette taxes should only affect the happiness of those who are at smokers, former smokers, and potential smokers. We can therefore compare the effect of taxes on this group to the impact on those who are at a lower risk of smoking.

We cannot do so by using direct data on smoking, because smoking is itself a function of the tax rate. This leads to a potential sample selection bias: if those who stop smoking when tax rates go up are happier on average than those who continue smoking, this would bias us towards finding a reduction in happiness among (remaining) smokers as taxes rise. It is for this reason that the earlier literature does not generally compare those who receive welfare to those who do not, but rather those who are likely to receive welfare (e.g. low educated single mothers) to those who are not (e.g. highly educated married women).

In principle, we could surmount this problem by instrumenting smoking. But, in practice, there are also two additional concerns with using direct smoking information in our context. First, the happiness effect in our model should operate through current smokers (who are

**Table 6.2** Relation between cigarette taxes and unhappiness

	<i>Very Happy</i>	<i>Pretty Happy</i>	<i>Not Happy</i>
Tax	-0.011 (.019)	.030 (.021)	-0.018 (.015)
Married	0.177 (.009)	-0.080 (.011)	-0.095 (.008)
Separated/Divorced	0.018 (.009)	-0.018 (.012)	-0.003 (.009)
Widowed	0.036 (.012)	0.005 (.015)	-0.041 (.010)
High School Dropout	0.050 (.049)	0.012 (.042)	0.030 (.028)
High School Graduate	0.053 (.047)	0.032 (.043)	0.007 (.028)
Some College	0.058 (.049)	0.036 (.046)	0.002 (.029)
College Graduate	0.072 (.047)	0.020 (.045)	0.001 (.029)
Father High School Dropout	0.004 (.004)	0.006 (.005)	-0.009 (.004)
Mother High School Dropout	-0.008 (.007)	0.008 (.007)	0.002 (.005)
Father High School Graduate	0.009 (.007)	0.015 (.007)	-0.022 (.004)
Mother High School Graduate	0.004 (.008)	0.007 (.010)	-0.009 (.006)
Father Some College	0.011 (.012)	0.001 (.011)	-0.010 (.007)
Mother Some College	0.004 (.013)	0.012 (.014)	-0.014 (.007)
Father College Graduate	0.024 (.010)	-0.002 (.010)	-0.021 (.007)
Mother College Graduate	0.027 (.014)	-0.008 (.013)	-0.016 (.008)
Lowest Household Income Quartile	-0.045 (.011)	0.025 (.012)	0.028 (.010)
2nd Household Income Quartile	-0.024 (.010)	0.045 (.011)	-0.013 (.010)
3rd Household Income Quartile	0.009 (.012)	0.033 (.011)	-0.033 (.009)
Top Household Income Quartile	0.055 (.011)	-0.002 (.010)	-0.048 (.009)

**Table 6.2** Relation between cigarette taxes and unhappiness – *continued*

	<i>Very Happy</i>	<i>Pretty Happy</i>	<i>Not Happy</i>
White	-0.005 (.016)	0.031 (.013)	-0.019 (.009)
Black	-0.085 (.017)	0.041 (.014)	0.044 (.015)
One Child	-0.031 (.007)	0.016 (.009)	0.019 (.005)
Two Children	-0.019 (.007)	0.003 (.009)	0.021 (.006)
Three Children	-0.035 (.008)	0.013 (.010)	0.028 (.006)
Four Children	-0.019 (.011)	0.004 (.012)	0.021 (.009)
Five or More Children	-0.021 (.011)	0.005 (.010)	0.021 (.008)
Full Time Worker	0.029 (.012)	0.043 (.013)	-0.068 (.011)
Part Time Worker	0.022 (.012)	0.039 (.014)	-0.057 (.010)
Unemployed	-0.031 (.015)	-0.041 (.019)	0.080 (.017)
Not In Labor Force	0.036 (.011)	0.020 (.012)	-0.052 (.011)
Ever Worked	0.008 (.010)	-0.010 (.011)	0.003 (.007)
Unemployment Rate	-0.004 (.003)	0.004 (.002)	0.001 (.002)
Church Attendance Index	0.017 (.001)	-0.009 (.001)	-0.008 (.001)
Age*Sex Dummies	Yes	Yes	Yes
State Dummies	Yes	Yes	Yes
Year Dummies	Yes	Yes	Yes
Sample Size	36421	36421	36421

*Notes:* Dependent variable is a dummy variable indicating which answer people chose to a happiness question. The dependent variable in column (1) is the dummy for people reporting “very happy”; in column (2) it is the dummy for people reporting being “pretty happy” (2); and in column (3) it is the dummy for people reporting being “not happy”. Standard errors, which are corrected to allow for grouped error terms at the state-level, are in parentheses.

potentially reducing their quantity smoked in response to the tax), former smokers (who have quit in response to the tax), and even potential smokers (whose happiness may change through the reduced opportunity to smoke). That is, it is directly the *propensity to be a smoker* that is of interest in our context, not being a current smoker *per se*. Therefore, by using current smokers only, we would obtain a misleading answer as to the total effect of the tax. Second, smoking data are only available for a subset of years in the GSS, severely limiting our sample size.

We therefore follow the strategy of earlier work in comparing the impact of excise taxation on those with a propensity to smoke. Specifically, we first estimate a regression that relates smoking behavior to the observable predictors of smoking we see in the GSS data, which are the set of  $X$ s included in the regression above (and listed above). We estimate such an equation for each year that has smoking information, and use that to form a predicted probability of smoking ( $PSMOKE_{ijt}$ ).<sup>4</sup> The R-squared on these prediction equations vary between 0.13 and 0.2, with F-statistics on the regression that are always highly significant. Appendix Table 6.A1 shows a sample regression, from 1977 (the first year of the data). While we cannot perfectly predict smoking, there are some clear correlates in the data, most notably age/sex, education, and religious participation.

The simplest means of comparing those who do and do not have a propensity to smoke is to split the sample based on this predicted smoker index. In the first and second rows of Table 6.3, we show the results of our regression when we split the sample into those at a high propensity to smoke (predicted odds of smoking more than the sample median), and those with a low propensity (predicted odds of smoking less than the sample median). Doing this split, we see that there is an equal insignificant impact on being very happy in both samples. There is a stronger but insignificant effect of being somewhat happy in the high propensity sample, but not in the low propensity sample. Most notably, there is now a negative and marginally significant impact of taxes on unhappiness in the high propensity group, and a positive and insignificant impact in the low propensity group. These coefficients are significantly different from each other, showing that higher taxes reduce unhappiness more for those with a propensity to smoke.

These regressions are somewhat difficult to interpret, however, and they do not use the full information available from our smoking risk variable. We therefore next estimate equations of the form:

$$H_{ijt} = \alpha + \beta_j + \eta_t + \delta T_{jt} + \theta PSMOKE_{ijt} + \gamma T_{jt} * PSMOKE_{ijt} + \zeta X_{ijt} \quad (2)$$

**Table 6.3** Distinguishing impacts of tax by propensity to smoke

	<i>Very Happy</i>	<i>Somewhat Happy</i>	<i>Unhappy</i>
<b>Tax Rate – High Propensity</b>	<b>-0.005</b> (0.042)	<b>0.050</b> (0.045)	<b>-0.055</b> (0.029)
<b>Tax Rate – Low Propensity</b>	<b>-0.005</b> (0.040)	<b>0.003</b> (0.040)	<b>0.011</b> (0.017)
Tax Rate	-0.027 (.033)	-0.005 (.034)	0.032 (.020)
Propensity to Smoke	-0.069 (.038)	-0.014 (.040)	0.075 (.026)
<b>Propensity to Smoke * Tax Rate</b>	<b>0.047</b> (.078)	<b>0.109</b> (.070)	<b>-0.156</b> (.045)

*Notes:* Dependent variable is a dummy variable indicating which answer people chose to a happiness question. The dependent variable in columns (1) is the dummy for people reporting “very happy”; in column (2) it is the dummy for people reporting being “pretty happy” (2); and in column (3) it is the dummy for people reporting being “not happy”. Standard errors, which are corrected to allow for grouped error terms at the state-level, are in parentheses. Regressions include all controls listed in Table 6.2. First two rows split the sample into those with above and below median propensities to smoke. Bottom three rows estimate equation (2), including the tax rate, smoking propensities, and an interaction of the two.

where the coefficient of interest is now  $\gamma$ , the coefficient on the interaction of the tax rate and the smoking propensity index. We also include the set of covariates,  $X$ , that were used to predict smoking for our smoking propensity measure, and which may have independent effects on happiness, as well as a full set of state and year dummies. Note that when these  $X$  variables are included, the coefficient  $\theta$  is still identified by the fact that the prediction equations are estimated year-by-year, while we don’t allow for year-specific coefficients on the  $X$ s. But this is a very tenuous source of identification, and as a result we don’t focus our analysis on the direct effect of PSMOKE. Rather, the key coefficient is  $\gamma$  on the interaction between PSMOKE and  $T$ . This is well identified by the interaction between changing taxes within states over time and the predicted smoking risk. That is, we are now asking whether deviations in cigarette taxes from their state-specific mean cause a relative change in the happiness of those who have a high propensity to smoke relative to those who have a low propensity to smoke.

To see the intuition of this approach, imagine that we had simply contrasted the impact of taxation on those with low education (relatively likely to smoke) and high education (relatively unlikely to

smoke). The coefficient on education says nothing about the impact of taxes on happiness; it is included as a control, the role played by PSMOKE in equation (2). But the interaction of education with taxes would tell us whether taxes have a larger impact on those with a propensity to smoke. Our approach uses a full set of variables to get a richer prediction of smoking behavior, but the intuition is the same. The Appendix discusses this approach relative to an IV approach, and shows that our results are of a similar sign and significance, although larger in magnitude (as we predict) from this alternative approach.

Of course, this approach still makes a critical identifying assumption, which is that omitted factors impact those with a propensity to smoke and those without a propensity to smoke in the same way. We will provide some sensitivity tests below to demonstrate the validity of this assumption.

The second panel of Table 6.3 shows our findings from this approach. There is a positive but insignificant interaction between cigarette taxes and the propensity to smoke for the equations modeling “very happy” and “somewhat happy”. But there is a negative and very significant effect on the probability of answering “Not happy”. Specifically, the interaction term between the predicted smoking variable and the tax rate in column (3) is significantly negative. This suggests that cigarette taxes especially reduce unhappiness amongst those with a propensity to smoke. There are no significant effects on those unlikely to be smokers (as shown by the insignificant main effect on the tax variable in the regression); that is, as we see when we split the sample, higher taxes reduce the unhappiness of those with a propensity to smoke, with no effect on those less likely to be smokers. Given that the tax effect is shown most clearly in terms of a reduction in unhappiness, we focus on this dependent variable for the remainder of our analysis.

Interpreting the magnitude of these effects requires care. Since we are interested in comparing the effect on those with a propensity to smoke, relative to those without a propensity to smoke, one cannot simply compare those with PSMOKE = 1 and PSMOKE = 0. Instead, one should compare those demographic groups with high and low propensities to smoke. An easy way to do this is to focus on the demographics of actual smokers and non-smokers. The mean rate of predicted smoking (based on demographics) in our sample of smokers is 0.46, and the mean rate in our sample of non-smokers is 0.30. So a reasonable comparison is between those with values of PSMOKE of .46 and .30. This is the equivalent of comparing two demographic groups, one of which represents those very likely to be smokers and the other of

which represents those unlikely to be smokers. With this comparison, a \$1 rise in taxes reduces unhappiness of those with a propensity to smoke by  $0.16 \times -0.156$  or roughly 2.5 percentage points, relative to those unlikely to smoke.

There are two ways to gauge the size of this effect. The first is to contrast it to the impact of other predictors of happiness. For example, we find that, conditional on all other Xs, moving from the bottom to the third income quartile reduces unhappiness by about 4 percentage points. So a \$1.60 tax (roughly five times the sample mean) would be equivalent to moving someone with a propensity to smoke from the bottom to the third income quartile. Of course, this comparison is difficult because the impact of income on happiness is not well identified in our models. But our income coefficient is strikingly similar to that obtained by Gardner and Oswald (2001) in their study of the impact of random windfalls on happiness in the UK, suggesting that this cross-sectional approach can yield useful estimates of the impact of income on happiness.<sup>5</sup>

A different comparison is to consider what these results imply if the effects on happiness is only through reducing smoking. Estimates of the impact of excise taxes on tobacco expenditures are generally in the range of  $-0.5$ , although Gruber and Koszegi (2002) obtain a higher elasticity of roughly  $-0.6$  using more recent data. These estimates suggest that each 10 cent increase in price leads to a 6% decline in smoking. Our happiness regressions suggest that this tax rise is also associated with a decrease in 0.25 percentage points of unhappiness amongst those with a propensity to smoke, or roughly 1.6% of the baseline level of unhappiness of those who are smokers. Extrapolating, then, these findings suggest that reducing smoking by 100% would remove 27% of the unhappiness of smokers in the US. Alternatively, we find that reducing smoking by 100% would remove roughly two-thirds of the six percentage point unhappiness “gap” between smokers and non-smokers shown in Table 6.1. Obviously, though, these will be over-estimates since the taxes also operate in other ways, such as helping ex-smokers stay quit or preventing some from starting smoking in the first place.

## Part IV: Specification checks

### Contrast to Canada

Our first check of these striking results is to replicate them in a fully independent setting, Canada. Like its US counterpart, Canada’s General Social Survey has periodically since 1985 collected data on the

happiness of a large sample of Canadians; we use all available surveys that include a happiness question (1985, 1986, 1989, 1990, 1991, 1996, and 1998).<sup>6</sup> The Canadian GSS question asks “Would you describe yourself as very happy, somewhat happy, somewhat unhappy, or very unhappy”, and there is also an option for “no opinion”. Since only a very small share of the sample responds that they are very unhappy or no opinion, we combine those responses with somewhat unhappy to form our unhappiness category.<sup>7</sup> Moreover, as in the US, there have been very significant excise tax changes in Canada over this time period. Data on Canadian tobacco taxes were collected by Gruber, Sen and Stabile (2002), and incorporate both federal and provincial excise and sales taxes on cigarettes. We use the tax rate as of the month of the survey, since the Canadian GSS was collected in various months of the year over time.

The second set of columns of Table 6.1 shows the means of our data for the Canadian GSS. Canadian report much higher levels of happiness than the US: only 5% of the people report being unhappy, 34% report being “somewhat happy” and 59% report being “very happy” (with 2% missing). These differences are consistent with the literature reviewed earlier, which discusses the sensitivity of the happiness responses across countries or types of wording. But the consistent impacts of cigarette taxation we will see in both countries below confirm that these differences do not interfere with our tests.

Data on smoking is collected in the Canadian GSS in 1986, 1991, and 1996. In those years, 30% of Canadians report smoking. As in the US, smokers are less happy on average, less educated, and less attached to the labor force. We have endeavored to use as much as possible a common set of control variables in the two data sets, but the available variables are not identical (e.g. there are no consistent labor supply measures in the Canadian GSS). The prediction equation for smoking in the Canadian GSS for 1986 is shown in Appendix Table 6.A1 as well. The R-squared of the predictions regressions is roughly 0.1 in all three years, with age/sex, marital status, education, religious participation, and income (measured at both the household and individual level) significant predictors of smoking.

Taxes are higher in Canada, with a mean tax rate of over \$1 (Canadian) per pack. The average PPP exchange rate over our time period was 1.26 (OECD, 2002), so that this is a much higher tax per pack even in constant dollar terms. Moreover, the tax in Canada is much more variable over this time period, with a standard deviation that is 2.5 times as large as in the US.

Table 6.4 shows a parallel set of regressions to the US results, using our Canadian data. The first three columns show the results from regression specification (1), regressing happiness on the tax rate. Once again, these simple regressions do not show a very significant pattern of results, although in this case there is a marginally significant reduction in overall unhappiness when taxes are higher.

We therefore once again attempt to increase the efficiency of this test by interacting the excise tax with our smoker propensity index. So we reestimate (2) for this Canadian sample, including the tax rate, PSMOKE (estimated now for Canada, as shown for one year in the second column of the Appendix table), and the interaction of the two. As the second set of columns in Table 6.4 show, we once again see a very statistically significant reduction in the odds of being unhappy from high taxes for those with a propensity to smoke; the interaction of PSMOKE and TAX in the last column is highly significant. There is a reduction in the odds of being somewhat happy as well, and a rise in the odds of being very happy.

In absolute value, the magnitudes from this test in Canada are much smaller than in the US. Here, we find that (at the mean difference in predicted smoking rates among smokers and nonsmokers), the estimates imply that a \$1.00 tax increase would reduce unhappiness by 0.6 percentage points. This implies that it would take a \$3.57 tax to parallel the happiness effects of moving from the bottom to the third income quartile (a 2.8 percentage point reduction in unhappiness, accounting for both the personal and household income effects).

But, relative to baseline prices, which are about three times as large in Canada as the US, the effects are remarkably similar across countries. Using the estimated elasticity of consumption of  $-0.45$  from Gruber, Sen and Stabile (2002), we estimate that a ten cent tax increase would reduce smoking by 3% in Canada. This same tax increase would reduce unhappiness by 0.06 percentage points, or 0.94% of baseline. Thus, similarly to the US, the results imply that reducing smoking by 100% would remove roughly 30% of the unhappiness of smokers. Alternatively, reducing smoking by 100% would remove roughly all of the gap in unhappiness between smokers and nonsmokers.

One possible interpretation of this result could come from the higher level of base prices in Canada, relative to the US. Given these high taxes already in place in Canada, the remaining pool of smokers may be those with the largest self-control problems. These smokers may need much larger tax changes to dissuade them from smoking.

**Table 6.4** Effects of cigarette taxes on happiness in Canada

	<i>Very Happy</i>	<i>Somewhat Happy</i>	<i>Unhappy</i>	<i>Very Happy</i>	<i>Somewhat Happy</i>	<i>Unhappy</i>
Tax	0.021 (.024)	-0.003 (.023)	-0.013 (.007)	0.000 (.029)	0.013 (.023)	0.000 (.011)
Propensity to Smoke				0.198 (.051)	0.194 (.055)	0.096 (.040)
<b>Propensity to Smoke * Tax</b>				<b>0.072 (.062)</b>	<b>-0.058 (.052)</b>	<b>-0.048 (.020)</b>
Married	0.119 (.005)	-0.098 (.003)	-0.020 (.004)	0.118 (.005)	-0.098 (.004)	-0.020 (.004)
Separated/Divorced	-0.005 (.008)	-0.014 (.007)	0.027 (.002)	-0.029 (.008)	-0.025 (.009)	0.023 (.004)
Widowed	-0.004 (.008)	-0.028 (.010)	0.025 (.004)	-0.010 (.009)	-0.034 (.009)	0.023 (.004)
High School Dropout	0.155 (.017)	0.152 (.019)	0.024 (.003)	0.135 (.013)	0.144 (.018)	0.022 (.005)
High School Graduate	0.199 (.017)	0.127 (.020)	0.013 (.004)	0.191 (.014)	0.123 (.019)	0.012 (.004)
Some College	0.205 (.023)	0.121 (.015)	0.014 (.005)	0.210 (.021)	0.124 (.014)	0.015 (.005)
College Graduate	0.201 (.027)	0.126 (.018)	0.014 (.003)	0.220 (.027)	0.135 (.017)	0.017 (.003)
Lowest Household Income Quartile	-0.038 (.024)	0.041 (.015)	0.022 (.010)	-0.049 (.023)	0.036 (.015)	0.021 (.009)
2nd Household Income Quartile	-0.021 (.011)	0.042 (.008)	0.002 (.004)	-0.026 (.011)	0.039 (.008)	0.001 (.004)
3rd Household Income Quartile	-0.009 (.004)	0.021 (.005)	0.006 (.003)	-0.010 (.004)	0.020 (.005)	0.006 (.003)
Top Household Income Quartile	0.039 (.005)	-0.013 (.003)	-0.010 (.003)	0.048 (.007)	-0.009 (.003)	-0.008 (.003)
Lowest Personal Income Quartile	-0.019 (.009)	0.028 (.007)	0.023 (.006)	-0.016 (.009)	0.029 (.007)	0.023 (.006)
2nd Personal Income Quartile	-0.008 (.008)	0.022 (.006)	0.017 (.003)	-0.018 (.007)	0.018 (.005)	0.015 (.003)
3rd Personal Income Quartile	0.017 (.006)	0.018 (.007)	-0.000 (.004)	0.007 (.006)	0.013 (.007)	-0.002 (.005)
Top Personal Income Quartile	0.030 (.012)	0.007 (.007)	-0.006 (.002)	0.030 (.012)	0.008 (.006)	-0.006 (.002)
Household Size 2	0.018 (.014)	-0.008 (.013)	-0.009 (.006)	0.014 (.013)	-0.011 (.013)	-0.010 (.006)
Household Size 3	0.005 (.008)	0.006 (.005)	-0.011 (.004)	-0.005 (.008)	0.001 (.006)	-0.013 (.003)

**Table 6.4** Effects of cigarette taxes on happiness in Canada – *continued*

	<i>Very Happy</i>	<i>Somewhat Happy</i>	<i>Unhappy</i>	<i>Very Happy</i>	<i>Somewhat Happy</i>	<i>Unhappy</i>
Household Size 4+	0.005 (.011)	0.005 (.012)	-0.013 (.005)	0.003 (.011)	0.004 (.012)	-0.013 (.005)
Unemployment Rate	-0.004 (.005)	0.005 (.003)	0.000 (.002)	-0.004 (.005)	0.005 (.003)	0.000 (.002)
Attend Church Weekly	0.100 (.005)	-0.055 (.005)	-0.020 (.002)	0.147 (.011)	-0.034 (.007)	-0.012 (.007)
Attend Church Monthly	0.059 (.006)	-0.023 (.006)	-0.014 (.003)	0.086 (.007)	-0.011 (.009)	-0.010 (.006)
Attend Church Annually or Less	0.029 (.012)	0.000 (.010)	-0.010 (.001)	0.039 (.013)	0.004 (.010)	-0.009 (.002)
Born in Canada	0.054 (.009)	-0.005 (.004)	-0.009 (.002)	0.031 (.010)	-0.016 (.004)	-0.012 (.005)
Live in House	0.025 (.010)	0.000 (.009)	0.011 (.003)	0.036 (.011)	0.006 (.009)	0.013 (.005)
Live in Apartment	0.031 (.008)	0.020 (.007)	0.016 (.001)	0.038 (.009)	0.023 (.007)	0.017 (.001)
Own Dwelling?	0.046 (.009)	0.009 (.003)	-0.013 (.004)	0.065 (.012)	0.018 (.002)	-0.011 (.002)
Speak English at Home	-0.012 (.020)	0.010 (.018)	-0.000 (.003)	-0.015 (.019)	0.008 (.018)	-0.001 (.003)
Age*Sex Dummies	Yes	Yes	Yes	Yes	Yes	Yes
State Dummies	Yes	Yes	Yes	Yes	Yes	Yes
Year Dummies	Yes	Yes	Yes	Yes	Yes	Yes
Sample Size	36421	36421	36421	100663	100663	100663

*Notes:* Dependent variable is a dummy variable indicating which answer people chose to a happiness question. The dependent variable in columns (1) and (4) is the dummy for people reporting “very happy”; in columns (2) and (5) it is the dummy for people reporting being “somewhat happy”; and in columns (3) and (6) it is the dummy for people reporting being “unhappy”. Standard errors, which are corrected to allow for grouped error terms at the province-level, are in parentheses. The first three columns estimate equation (1); the second three columns estimate equation (2), including propensity to smoke and its interaction with the tax rate.

Beyond the exact magnitudes, what is critical here is that we have replicated this exercise in a completely independent data set, with a different (and more dramatic) set of policy changes. Yet we find a very similar pattern of results. This confirms that our findings are not driven by any peculiarities of the US GSS, or institutional particularities of our country. For the remainder of the paper, we show our remaining analysis for both countries where possible.

**Control group validity**

One specific concern that is not fully addressed by our use of the Canadian data is that those who do not have a propensity to smoke don't form a legitimate control group for assessing the impact of taxes on those with a propensity to smoke. For example, these groups may be impacted differently by business cycle effects that are correlated

**Table 6.5** Robustness checks

<b>Panel A: US Data</b>					
Tax	0.032 (.020)	0.033 (.020)	0.036 (.022)	0.070 (.021)	0.015 (.022)
Propensity to Smoke	0.075 (.026)	-0.006 (.036)	0.011 (.059)	0.073 (.025)	-0.190 (.025)
<b>Propensity to Smoke*Tax</b>	<b>-0.156 (.045)</b>	<b>-0.152 (.049)</b>	<b>-0.167 (.046)</b>	<b>-0.152 (.042)</b>	<b>-0.104 (.077)</b>
<b>Panel B: Canadian Data</b>					
Tax	0.000 (.011)	0.000 (.011)	0.010 (.009)	0.018 (.016)	0.003 (.015)
Propensity to Smoke	0.096 (.040)	0.072 (.061)	0.180 (.061)	0.097 (.040)	0.096 (.051)
<b>Propensity to Smoke*Tax</b>	<b>-0.048 (.020)</b>	<b>-0.048 (.021)</b>	<b>-0.082 (.026)</b>	<b>-0.048 (.020)</b>	<b>-.057 (.031)</b>
Demographic Controls	Yes	Yes	Yes	Yes	Yes
State Dummies	Yes	Yes	Yes	Yes	Yes
Year Dummies	Yes	Yes	Yes	Yes	Yes
Propensity to Smoke* Unemployment Rate	No	Yes	No	No	No
State Dummies*Trend	No	No	Yes	No	No
Propensity to Smoke*Trend	No	No	No	Yes	No
State Dummies* Propensity to Smoke	No	No	No	No	Yes

*Notes:* Standard errors are in parenthesis and are corrected to allow for correlation within states or provinces. The dependent variable in each column is a dummy for unhappiness. "Propensity to Smoke\*Unemployment Rate" means that the effect of propensity to smoke was allowed to depend on the unemployment rate in the state. "State Dummies\*Trend" means each state was allowed to have its own linear time trend. "Propensity to Smoke\*Trend" means that the regression includes an interaction of propensity to smoke with a linear time trend. "State Dummies\*Propensity to Smoke" means that propensity to smoke was allowed to have a different effect in each state. Regressions include all of the control variables shown in Tables 6.2 (for US) and 6.4 (for Canada).

with tax rate setting. Or, if government spending is more redistributive than excise taxation, or at least valued more by the type of individuals who have a propensity to smoke, our finding could reflect the happiness effects of spending, not excise taxation.

We address this concern in two ways, focusing on the “unhappy” variables in both countries, and the specification that interacts taxes with predicted smoking (equation (2)). First, in Table 6.5, we assess whether there are omitted interactions of other types that might explain the observed significant interaction of taxes and predicted smoking. In the first column, we show our basic results from Tables 6.3 and 6.4 for comparison. In the second column, we interact the state/year unemployment rate with PSMOKE, to capture any differential impacts of the cycle on the happiness of those with different smoking propensities; this has no impact on our estimates. In the third column, we interact a linear time trend with each of the state dummies, to allow for any slow moving correlations between state tax setting and well-being in that state; this serves to strengthen our results somewhat, particularly for Canada. In the fourth column, we interact a linear time trend with the predicted smoking measure, to allow for separate trends in well-being for those with different propensities to smoke; once again, there is little impact. In the fifth column, we interact each state dummy with PSMOKE to allow for the effect of smoking propensities to vary by state; this reduces the estimate somewhat in the US, but raises it in Canada. Overall, our findings are reasonably robust to these controls for differential sensitivity to cyclical conditions, slow-moving trends in the data, or heterogeneity in populations across states.

Table 6.6 presents an even more convincing test: comparing the impact of cigarette excise taxes to other taxes. If we are finding a spending effect, or even some other type of political economy effect, we should see a similar effect of an interaction of these other taxes with the propensity to smoke. To address this point, we have gathered data on three other state or province taxes: the excise taxes on gas and alcohol, and the state or province sales tax rate.<sup>8</sup> We have also gathered data on state or province real revenues per capita. We add to our regression specification these tax variables, as well as their own interactions with PSMOKE. If we are finding a general tax effect, then these interactions should be at least as important in our regression as the interaction of the cigarette excise tax with smoking propensities. But, if we are finding a cigarette tax-specific effect, then our existing results should not much change, and these additional interactions should be insignificant. As in Table 6.5, we focus on the model of unhappiness in both the U.S. and Canada.

Table 6.6 "Effect" of other taxes

<b>Panel A: US Data</b>				
	<i>Beer Tax</i>	<i>Gas Tax</i>	<i>Sales Tax</i>	<i>Total Revenues</i>
Cigarette Tax	0.038 (.024)	0.035 (.020)	0.033 (.020)	0.029 (.019)
Other Tax	-0.017 (.008)	-0.001 (.001)	0.003 (.004)	-0.004 (.023)
Propensity to Smoke	0.055 (.031)	0.060 (.048)	0.060 (.033)	0.125 (.038)
<b>Propensity to Smoke*Cigarette Tax</b>	<b>-0.181 (.055)</b>	<b>-0.162 (.043)</b>	<b>-0.159 (.045)</b>	<b>-0.144 (.043)</b>
<b>Propensity to Smoke*Other Tax</b>	<b>0.034 (.014)</b>	<b>0.001 (.003)</b>	<b>0.003 (.006)</b>	<b>-0.037 (.021)</b>
<b>Panel B: Canadian Data</b>				
	<i>Beer Tax</i>	<i>Gas Tax</i>	<i>Sales Tax</i>	<i>Total Revenues</i>
Cigarette Tax	0.003 (.008)	0.008 (.006)	0.004 (.010)	0.002 (.009)
Other Tax	-0.006 (.002)	-0.002 (.001)	-0.004 (.001)	-0.006 (.004)
Propensity to Smoke	0.082 (.048)	0.072 (.044)	0.067 (.041)	0.059 (.034)
<b>Propensity to Smoke* Cigarette Tax</b>	<b>-0.045 (.020)</b>	<b>-0.047 (.021)</b>	<b>-0.048 (.019)</b>	<b>-0.049 (.020)</b>
<b>Propensity to Smoke*Other Tax</b>	<b>0.001 (.002)</b>	<b>0.002 (.001)</b>	<b>0.004 (.001)</b>	<b>0.009 (.007)</b>
Demographic Controls	Yes	Yes	Yes	Yes
State Dummies	Yes	Yes	Yes	Yes
Year Dummies	Yes	Yes	Yes	Yes

*Notes:* Standard errors are in parenthesis and are corrected to allow for correlation within states or provinces. The dependent variable in each column is a dummy for unhappiness. "Other Tax" refers to a different tax in each column. It refers to a beer or alcohol tax in column (1), gas tax in column (2), sales tax in column (3) and Total state/province revenues in column (4). Regressions include all of the control variables shown in Tables 6.2 (US) and 6.4 (Canada).

In column (1), we see the effect of the beer tax, in column (2), the effect of the gas tax, in column (3) the effect of the sales tax and in column (4), the effect of total state revenues. In all four cases and in both countries, we see that the inclusion of these variables does not much affect the initial estimate of the cigarette tax\*smoking propensity interaction. Moreover, the new interaction terms with other taxes themselves are never negative and significant, although, for the U.S., there is a marginally significant negative effect of revenues per capita. For the beer tax in the U.S., and for the gas and sales taxes in Canada, the interaction with smoking propensity is actually positive and significant, suggesting that higher tax rates on those items raise unhappiness among those with a propensity to smoke. This may reflect the fact that these regressive taxes are targeted to those low income persons most likely to smoke. But, if anything, they suggest a bias against our finding for cigarette taxation. Thus there is little evidence that it is *spending* of tax money (rather than the tax itself) that is affecting smoker happiness.

Yet another possibility is that cigarette taxes are somehow spent differently than other kinds of taxes, so that there remains a happiness effect through the revenue side. We have investigated this possibility by gathering data on the composition of public spending in the U.S. over the 1977–99 period, decomposing total spending into spending on: educational services, social services, transportation, public safety, environment and housing, government administration, utility expenditures and other spending. We then regressed each of these spending categories on the different taxes to determine whether the marginal effect of cigarette taxes was different than the other taxes we have studied. No significant pattern was found. This suggests that differential spending of cigarette tax revenues does not drive our results.

## Part V: Interpretation

The analysis thus far has demonstrated that higher cigarette taxes are clearly associated with a rise in the reported well-being of those with a propensity to smoke. How do we interpret these results? On their face, they appear *inconsistent with the standard rational addiction model*. In that model, there is no reason for smokers to see an increase in utility when taxes are higher. If higher taxes were to raise utility, then the rational addict could achieve the same outcome by simply reducing smoking by the amount that the tax does, i.e. by emulating the tax. So cigarette taxes should reduce the happiness of Becker-Murphy rational addicts.

But there are alternative interpretations that could rescue the rational addiction model. One possibility is to argue that it is not smokers who are made happier but instead the spouses and relatives of smokers. Since our identification strategy compares those with a propensity to smoke to those without this propensity, our estimates would also include this externality effect if spouses and relatives have similar background characteristics.

Of course, if higher taxes made family members better off, then this would indicate another potential failure of the standard model: imperfect family utility maximization. That is, by the same logic that shows that rational addicts cannot be made better off by a higher tax, families of smokers cannot be made better off by a higher tax if the smoker was maximizing family utility. If family utility was being maximized, and family members were on net better off with less smoking, then smoking would have already fallen. But the failure to maximize family utility is a very different type of failure than that discussed earlier, so it is important to distinguish whether this is driving our results.

We have investigated this possibility in two ways. First, we separately estimated our models by demographic groups. If our effects are due to individual internalities, there is no *a priori* reason to believe the self-control problem ought to be greater for any particular group. If, on the other hand, our effects were due to intra-family externalities, one would expect differences. Specifically, one would expect married people to show bigger effects since they are more likely to experience the externalities of smoking. Moreover, since men smoke more, wives should experience a bigger externality than husbands. In fact, however, we found no consistent pattern of results across the two countries; the effects were indeed largest for married women in the U.S., but they were largest for single men in Canada.

We therefore explored an alternative approach in the U.S. data. Using the available information on spousal characteristics in the survey data, we estimate spousal predicted smoking as a function of the same set of covariates as above, but using the spouse's education and labor supply in place of the respondent. This allows us to augment our regression model by also including the predicted smoking of the spouse and its interaction with the tax. If our results are driven by within-family externalities, then we would see effects through spousal smoking propensities, and reduced or zero effects through own smoking propensities. Unfortunately, this exercise cannot be carried out in Canada due to the paucity of information on spousal characteristics.

**Table 6.7** Effect by demographic group in US GSS

	<i>Married</i>	<i>Married</i>
Tax	0.075 (.021)	0.104 (.027)
Propensity to Smoke	0.071 (.038)	0.061 (.043)
<b>Propensity to Smoke*Tax</b>	<b>-0.219</b> <b>(.065)</b>	<b>-0.194</b> <b>(.044)</b>
Spouse's Propensity to Smoke		0.046 (.082)
<b>Spouse Propensity to Smoke*Tax</b>		<b>-0.126</b> <b>(.072)</b>
Demographic Controls	Yes	Yes
State Dummies	Yes	Yes
Year Dummies	Yes	Yes

*Notes:* Standard errors are in parenthesis and are corrected to allow for correlation within states. The dependent variable in each column is a dummy for unhappiness. The first column repeats our basic estimates from equation (2) for the sample of married persons. Column 2 augments equation (2) by adding spouse's propensity to smoke, and an interaction of spouse's propensity to smoke with the tax rate. Regressions include all of the control variables shown in Table 6.2.

As Table 6.7 shows, we do find some weak evidence for a role for spousal smoking in determining own happiness. The first column of Table 6.7 presents our model estimated only for married persons; the effect here is somewhat larger than in the full sample. We then include spousal smoking propensity and its interaction with the tax rate; in these models, we are also including as X variables the additional spousal characteristics that determine spousal smoking propensities. The interaction of spousal smoking propensities and the tax is negative and marginally significant for all married persons; that is, married couples where the spouse is more likely to smoke are also made marginally better off by the tax. But the inclusion of this term has no effect on our key estimated interaction of respondent's smoking propensity with the tax. Thus, within-family externalities may be present, but they appear unable to explain our results.

A second, more fundamental, complication in interpreting these results as evidence against the rational addiction model is the timing of the happiness gains. For a rational addict, the cost of quitting smoking

today is clearly negative, but the effect on future happiness can be positive. This is because reducing smoking today can raise future utility. Put another way, the tax inducing someone to reduce smoking is analogous to an investment in which he bears a cost today (immediate pain of withdrawal) and reaps a benefit in the future (longer life expectancy). The net effect of this investment on utility (using the smoker's discount rate) is negative in the rational addiction model.

But it is possible that our measure is under-measuring the short-run costs and over-weighting the long-run benefits, thereby producing an illusory positive gain to smokers. The problem is that our existing test does not measure the immediate impacts of the tax, but rather the average impacts over time. Since we are regressing current happiness on current taxes, our estimated coefficients include the immediate effect of taxes on happiness. But if taxes are correlated over time, they will also include the lagged effect. Specifically, the more auto-correlated cigarette taxes are, the more the estimated effect in equation (2) includes the effect of lagged taxes. Thus, our test cannot rule out that time consistent smokers are being made better off in the long run, which through serially correlated tobacco taxes appears as an effect of the current tax on happiness.

A stronger test would be to assess the *immediate* impact of tax increases on well-being; this should clearly be negative for the rational addict.<sup>9</sup> Specifically, we would like to model the short run impact of taxes on happiness, examining period to period changes rather than deviations from long run state means. But doing so increases our data requirements dramatically. To measure the average effect over time in a fixed effects framework, all we require is that, summed over all periods before and after a tax changes in a state, we have sufficient observations to identify an impact of a tax change. But, to examine an immediate impact requires having data in one period on enough observations to distinguish the impact of taxation. This is impossible in the US GSS. This data has the advantage of many years of information, but the typical sample size in any year is fewer than 2000 observations, which is then divided over 50 states. When years are pooled, our state specific sample sizes are sufficient to identify average tax effects. But identifying short run effects is impossible.

The Canadian GSS, however, does permit a short run comparison. Our Canadian GSS data have between 9300 and 27,600 observations per year. Moreover, these are divided over only 10 provinces, so that the average province/year cell size is over 2000 observations. Thus, we can aggregate these data to the province/year level and estimate

changes regressions that allow us to examine short run impacts of tax changes.

To do so, we divide our Canadian GSS sample into those with a propensity to smoke, and those without a propensity to smoke; the former group is composed of those above the 75<sup>th</sup> percentile of the predicted smoker distribution (a 41% chance of smoking or greater), while the latter is composed of those below the 25<sup>th</sup> percentile (a 19% chance of smoking or smaller). We then create a data set where each observation measures the mean level of unhappiness and excise taxes for each smoking propensity group in each province in each survey year. Using these data, we regress the *change* in mean happiness on the *change* in mean excise taxes separately for each group, including a full set of year dummies to capture time trends in happiness changes. By using changes, rather than fixed effects, we measure the short run, rather than the average longer run, effects of tax changes on well-being.

Estimating this changes model for those with a propensity to smoke, we obtain a coefficient of  $-0.044$  (0.016). This result confirms that, for those with a propensity to smoke, there is a short-run negative effect of higher taxes on unhappiness; when taxes rise, happiness falls. For those without a propensity to smoke, on the other hand, this changes model yields an estimate of  $-0.009$  (0.008), which is both statistically insignificant, and statistically significantly lower than the estimate for those with a propensity to smoke, confirming the causal interpretation of our finding for predicted smokers. Thus, it appears that, inconsistent with the rational addiction view, even in the short run smokers are made happier.

Of course, one could always argue that we are not looking short run enough. Perhaps the negative effects of quitting occur at much higher frequencies. If the costs of quitting are high enough and/or discount rates are high enough, even within one year a rational addict could be made better off from reducing smoking. But it seems unlikely that the cost of quitting could be that high, relative to the long-term benefits of having quit. For example, our estimates imply that quitting smoking would reduce unhappiness by about the same amount as moving from the bottom to the third income quartile, a rise in income of \$15,000. For a discount rate of 5%, the costs of quitting would have to be *over* \$275,000 for a rational addict to be made better off within a year from quitting smoking. Even if the discount rate is 10%, the cost of quitting would have to be almost \$170,000 for the rational addict to be better off. These estimates seem implausibly large. Within a rational addiction framework, it is highly unlikely that smokers could be made better off in the short run.

If our results contradict the rational addiction model, which models do they support? One is the model of Gruber and Koszegi (2001, 2002), who embed within the Becker-Murphy stock addiction framework preferences that are *time inconsistent*, following Laibson (1997) and O'Donoghue and Rabin (1999). The Becker-Murphy model features exponential discounting, where consumption  $k$  periods ahead is discounted by  $\delta^k$ , for any  $k$ . In this quasi-hyperbolic formulation used by Gruber and Koszegi, the discounting is exponential starting next period, but that entire future is discounted by an extra factor from today's perspective. More specifically, next period is discounted by  $\beta$ , the following period by  $\beta^2$ , and  $k$  periods in the future by  $\beta^k$ , where  $\beta < 1$  is an extra discount factor that changes the discounting of this period relative to the entire future.

The key feature of such a hyperbolic model is that individuals will have self-control problems. Specifically, individuals would like to smoke less in the future than he actually can. The problem arises because he is patient about the future (the relative discount rate between future periods is  $\delta$ ), but impatient about the present (the relative discount rate between today and tomorrow is  $\beta < \delta$ ). So when planning about the future, the hyperbolic person makes patient plans (e.g. smoke less) but when the time comes to act they always end up making impatient choices (e.g. smoke more).

Because of this time inconsistency, cigarette taxes can raise the discounted utility of sophisticated hyperbolic consumers. The reason is that the tax serves as a self-commitment device.<sup>10</sup> By forcing a reduction in the smoking in the future, the tax allows the hyperbolic agent to do something they would not be otherwise be able to do.<sup>11</sup> Our findings are therefore potentially consistent with this alternative to the rational addiction model.

Moreover, quantitatively the findings can give guidance about choosing between different hyperbolic models. One key variable in hyperbolic models is the degree of naivete agents have about their self-control problems. This is readily modeled by assuming that agents think their discount function is described by a hyperbolic ( $\beta'$ ,  $\delta$ ). They have complete self-knowledge of their self-control problem if  $\beta' = \beta$ , and have no self-knowledge if  $\beta' = 1$ , with intermediate values parameterizing the extent of naivete. Our results above are most consistent with intermediate cases:  $\beta < \beta' < 1$ . If  $\beta' = \beta$ , since agents are fully aware of their self-control problems, they should be demanding self-control devices quite strongly since our results suggest the happiness gains are very large, yet

we do not see smokers organizing to lobby en masse for cigarette taxes. At the other extreme, if  $\beta' = 1$ , agents would not experience a large immediate utility gain from a cigarette taxes since they (incorrectly) presume that they would have stopped smoking anyway. The large utility gains are, therefore, best explained by models where smokers recognize they have self-control problems but under-appreciate their magnitude ( $\beta < \beta' < 1$ ). Thus they are made even happier by taxes than they would have forecast.

Of course, the Gruber and Koszegi model is not the only alternative which highlights self-control problems. In the temptation model of Bernheim and Rangel (2002), the failures of rational addiction are not due to preferences, but rather due to cognitive processing. Agents essentially face "tempted" and "untempted" states, and, in the tempted state, they lose self-control and overconsume the addictive goods. But there is, by definition, no price elasticity in the "tempted" state, so that higher prices serve no self-control purpose; thus, higher prices only make them worse off. Similarly, in the model of Gul and Pessendorfer (2001), there is a direct disutility from being tempted; but, so long as the agent can afford the product which is tempting them, there is no reduction in this disutility from higher prices. Thus, on their face, neither of these models is consistent with the findings of this paper. But variations on these models which introduce price elasticities into the "tempted" state could deliver similar implications for well-being to those derived from the sophisticated hyperbolic model.

Thus, the results presented here are consistent with several self-control alternatives to the Becker-Murphy model. Further distinguishing among these particular alternatives is difficult. But the key point is that most alternatives which imply a rise in well-being from higher excise taxation have radical implications for government policy. Under the rational addiction model, there is no rationale for government regulation of addictive bads other than interpersonal externalities; for cigarettes, in fact, most estimates of the externalities from smoking are well below the existing average level of excise taxation (Gruber and Koszegi 2002). But alternatives such as time inconsistent models suggest that the optimal excise tax is greater than zero even absent externalities, due to the self-control benefits to time inconsistent agents. For example, in their specific model Gruber and Koszegi (2002) find that the optimal tax, even with very modest time inconsistency, is well above \$1 per pack, above and beyond externalities.

## Part VI: Conclusions

The results in this paper have potentially important implications for how policy makers should view smoking in general and cigarette taxes in particular. In particular, they suggest that smokers themselves may be made better off by cigarette taxes. This result is inconsistent with rational views of smoking that would view such a tax as a pure hindrance on smokers, and more consistent with alternatives such as behavioral time-inconsistent models in which these taxes may serve as self-control devices.

The methodology used in this paper should also have broader interest. Economists are often concerned with welfare, with how policies affect the happiness of people. Yet there are few tools for empirically assessing welfare. In the case of smoking, as with many other behaviors, behavioral reactions to changes in the environment can only provide limited insight into the welfare implications of policy interventions. Theories that have very different policy implications can accommodate a variety of behaviors and, as a consequence, empirical work on behavioral responses can leave us in the dark about welfare.

Subjective well-being measures provide a possible way to directly address welfare questions. As our analysis shows, this direct approach is empirically feasible. Happiness measures may be noisy, but in our case at least, they contain sufficient signal to discern effects of moderate size policies. This is heartening because happiness data is abundant. In the US, the GSS is available in moderately large samples for many years. Looking beyond the US, the Canada data we use is not the exception but rather the rule: many countries, notably in Europe, collect cross-sections and panel data on happiness. In short, the results in this paper suggest that by using happiness data, economists may be able to directly assess the impacts of public policy on well-being.

### Appendix: Alternative Empirical Approaches

We argue above that the correct empirical approach to addressing our question of interest is to interact the cigarette tax with a measure of the propensity to smoke. In this appendix, we show the results of alternative empirical approaches for comparison.

A natural alternative would be to interact cigarette taxes with whether an individual is actually a smoker. As we argue above, this is an inappropriate specification for two reasons. First, smoking is endo-

genous, so that the composition of happiness smokers may change as taxes change for reasons unrelated to the tax change. Second, taxes may affect the happiness of former smokers (by making it easier to resist the temptation to resume smoking) or prospective smokers (by making it easier to never start smoking in the first place). As a practical matter, we also lack data on who smokes for the full sample. Nevertheless, we present the results from this alternative specification in the first column of Appendix Table 6.A2, for both the U.S. and Canada. We find that there is a negative effect on unhappiness for smokers when cigarette taxes rise, but the effects are not significant. One reason for this lack of significance is the reduced sample size: the smoking data are only available for a subset of survey years in both countries.

We can address the first of the concerns expressed above by instrumenting smoking with predicted smoking. Of course, doing so will not address the second concern, which is that the effects come from groups of non-smokers as well, in particular from recent former smokers. Because of this, our instrumental variables estimate will *overstate* the true impact on the happiness of all groups; that is, the effect of all groups is assumed to come through only one group (current smokers), so that this estimate will be too large.

Column (2) of Appendix Table 6.A2 shows the results of this IV approach. The coefficient from the U.S. indicates that being a \$1 tax lowers unhappiness by 30 percentage points among smokers, an estimate which is very large. In Canada, a \$1 tax lowers unhappiness by 3.8 percentage points among smokers, which is a more modest but still a large effect.

For the U.S., part of this large effect comes from the restricted set of years in which smoking data are available. Column (3) shows the results of estimating the base predicted smoker interaction model used in the paper for this subsample of years. The coefficient is twice as large as the coefficient in Table 6.3. Extrapolating, that implies that the effect of a tax on the happiness of smokers over all years would be only half as large as in the second column of Appendix Table 6.A2, or 15 percentage points. This is still very large, but it is once again upward biased by the fact that much of the impact may be on nonsmokers. In Canada, the estimate is somewhat lower in the restricted set of years, so that the coefficient in column (2) should perhaps be increased. Indeed, doing so, we get a quite similar ratio of the impacts in Canada to those in the U.S. (about 1 to 4) that we see in the main results.

**Appendix Table 6.A1** Smoking prediction equations

	<i>US Data (1977)</i>	<i>Canadian Data (1985)</i>
Married	-0.045 (.045)	0.014 (.015)
Separated/Divorced	0.076 (.056)	0.118 (.021)
Widowed	-0.026 (.062)	0.079 (.019)
High School Dropout	-0.045 (.167)	-0.042 (.039)
High School Graduate	-0.123 (.167)	-0.074 (.040)
Some College	-0.187 (.169)	-0.119 (.041)
College Graduate	-0.303 (.170)	-0.180 (.040)
Father High School Dropout	-0.057 (.031)	
Mother High School Dropout	0.093 (.036)	
Father High School Graduate	-0.020 (.042)	
Mother High School Graduate	0.087 (.042)	
Father Some College	-0.025 (.063)	
Mother Some College	0.054 (.064)	
Father College Graduate	-0.021 (.065)	
Mother College Graduate	0.070 (.075)	
Lowest Household Income Quartile	-0.029 (.043)	0.022 (.015)
2nd Household Income Quartile	0.006 (.038)	0.029 (.014)
3rd Household Income Quartile	0.025 (.035)	0.040 (.015)
Top Household Income Quartile	0.054 (.011)	-0.001 (.016)

**Appendix Table 6.A1** Smoking prediction equations – *continued*

	<i>US Data</i> (1977)	<i>Canadian Data</i> (1985)
2nd Personal Income Quartile		0.007 (.015)
3rd Personal Income Quartile		0.011 (.016)
Top Personal Income Quartile		-0.050 (.018)
White	0.250 (.122)	
Black	0.005 (.126)	
One Child	-0.059 (.043)	
Two Children	-0.015 (.042)	
Three Children	-0.054 (.046)	
Four Children	-0.143 (.054)	
Five or More Children	-0.100 (.052)	
Household Size 2		0.027 (.015)
Household Size 3		0.048 (.017)
Household Size 4+		0.023 (.017)
Full Time Worker	0.095 (.065)	
Part Time Worker	-0.010 (.078)	
Unemployed	0.241 (.069)	
Not In Labor Force	0.074 (.011)	
Ever Worked	-0.002 (.048)	
Unemployment Rate	-0.12 (.009)	0.003 (.001)

**Appendix Table 6.A1** Smoking prediction equations – *continued*

	<i>US Data (1977)</i>	<i>Canadian Data (1985)</i>
Church Attendance Index	-0.044 (.005)	
Attend Church Weekly		-0.143 (.012)
Attend Church Monthly		-0.001 (.012)
Attend Church Annually or Less		0.039 (.013)
Born in Canada		0.075 (.012)
Live in House		-.029 (.013)
Live in Apartment		0.001 (.016)
Own Dwelling?		-0.075 (.014)
Speak English at Home		0.012 (.012)
Age*Sex Dummies	Yes	Yes
State Dummies	Yes	Yes
Year Dummies	Yes	Yes
R-squared	0.16	0.11
Sample Size	36421	100663

*Notes:* Dependent variable is a dummy variable for being a smoker. Standard errors, which are corrected to allow for grouped error terms at the state/province-level, are in parentheses. The first column uses US data for 1977 while the second column uses Canadian data for 1985.

Appendix Table 6.A2 Alternative specifications

<b>Panel A: US Data</b>				
	<i>Baseline</i>	<i>Smoker</i>	<i>Smoker IV</i>	<i>Propensity, Smoke Years</i>
Cigarette Tax	0.032 (.020)	0.074 (.031)	0.108 (.034)	0.163 (.044)
Propensity to Smoke	0.075 (.026)			0.113 (.037)
Smoker		0.050 (.017)	0.153 (.042)	
<b>Propensity to Smoke* Cigarette Tax</b>	<b>-0.156 (.045)</b>			<b>-0.319 (.102)</b>
<b>Smoker*Cigarette Tax</b>		<b>-0.067 (.052)</b>	<b>-0.305 (.099)</b>	
<b>Panel B: Canadian Data</b>				
	<i>Baseline</i>	<i>Smoker</i>	<i>Smoker IV</i>	<i>Propensity, Smoke Years</i>
Cigarette Tax	0.000 (.011)	-0.002 (.006)	0.005 (.007)	0.005 (.008)
Propensity to Smoke	0.096 (.041)			0.050 (0.048)
Smoker		0.029 (.019)	0.049 (.046)	
<b>Propensity to Smoke* Cigarette Tax</b>	<b>-0.048 (.020)</b>			<b>-0.038 (.024)</b>
<b>Smoker*Cigarette Tax</b>		<b>-0.010 (.014)</b>	<b>-0.038 (.024)</b>	
Demographic Controls	Yes	Yes	Yes	Yes
State Dummies	Yes	Yes	Yes	Yes
Year Dummies	Yes	Yes	Yes	Yes

*Notes:* Standard errors are in parenthesis and are corrected to allow for correlation within states or provinces. The dependent variable in each column is a dummy for unhappiness. "Other Tax" refers to a different tax in each column. It refers to a beer or alcohol tax in column (1), gas tax in column (2), sales tax in column (3) and Total state/province revenues in column (4). Regressions include all of the control variables shown in Tables 6.2 (US) and 6.4 (Canada).

## Notes

- 1 [http://www.newstribune.com/stories/071302/bus\\_0713020036.asp](http://www.newstribune.com/stories/071302/bus_0713020036.asp)
- 2 Easterlin (1974) provides an important early exception. Recent examples of work by economists using happiness data include Blanchflower and Oswald (1996), Clark and Oswald (1994), DiTella, MacCulloch and Oswald (2001) and Easterlin (1995).
- 3 A classic example of this approach is Ellwood and Bane (1985), who use demographic characteristics to distinguish those whose family structure and living arrangements are likely and unlikely to be affected by welfare benefit changes.
- 4 In years before the first smoking information is available (1973–76), we use the first available year of information to form the prediction. In years after the last smoking information is available (1994–98 in U.S.), we use the last available year. In years between, we interpolate from years that have the smoking information.
- 5 Gardner and Oswald find that a \$75,000 windfall reduces happiness by 0.2 standard deviations in their more convincing differences model. We estimate that moving from the bottom to the top income quartile would raise income by \$75,000 in real terms, and is associated with a 0.24 standard deviation drop in unhappiness.
- 6 The U.S. GSS survey is a random sample and requires no weighting, but the Canadian GSS is not nationally representative unless weighted, so that all of our regression estimates use survey weights.
- 7 The wording of the Canadian question changes somewhat over time. In 1986, the question adds “Presently, would you describe yourself as...”, and the 1991 and 1996 surveys add “usually, would you describe yourself as...”. These wording changes appear to affect the distribution of responses across the very and somewhat happy categories, but do not impact the share of the sample saying that they are unhappy, which is the category upon which we focus. Any overall impacts from wording changes will be captured in the year dummies included in the regression.
- 8 The sales tax rate in both countries is an ad valorem rate; the gasoline tax is cents per gallon in the U.S. and cents per litre in Canada; the alcohol tax is dollars per case of beer in the U.S. and ad valorem rate in Canada. All dollar tax rates are expressed in real terms.
- 9 In fact, ideally, we would examine the *ex-ante* impact of taxes on well-being, before the tax is even in place, to avoid any issue of quitting costs versus gains in health. One approach to doing so would be to assess the impact of excise taxes in the period when they are enacted, but not yet effective, following Gruber and Koszegi (2001); but the data requirements for such a test (large samples at a monthly frequency) are not met here. Another alternative would be to look at the stated preferences of smokers for cigarette taxation, or their patterns of voting on cigarette-related propositions. While such data is hard to find, it is even harder to interpret when it does exist. What would constitute evidence for the argument that smokers are made happier by cigarette taxes? Would a 60% support rate be enough? Smokers may favor cigarette taxes because they help them quit,

- but oppose such taxes on general political/redistributive grounds or other principles. Clearly this number would need to be bench-marked but it is not clear against what.
- 10 As Gruber and Koszegi (2002) discuss, this government-provided commitment device is valued by consumers because the private sector cannot plausibly provide true commitment.
  - 11 Of course, a sophisticated time inconsistent consumer's first choice would be a tax that started next period, but Gruber and Koszegi show that even a tax that starts this period would make time inconsistent smokers better off.

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# 7

## Happiness and the Pursuit of a Life Worth Living: An Anthropological Approach

Gordon Mathews

### The study of happiness: an anthropological view

The study of happiness, as presented in most chapters of this book is statistical. The researcher asks respondents how happy they are, or how satisfied with their lives they are, and compiles their answers statistically, to offer a universal measure that can be used to compare people of different societies, as well as different social classes, genders, and ages, as to happiness. These statistical findings have, no doubt, a broad accuracy. At a subtler level, however, their accuracy is arguable.

Indeed, these studies leave out a great deal. First, what does happiness, or life-satisfaction, or well-being, mean in different languages? Different languages have different formulations of these terms that carry different connotations. In Japanese, the word *shiwase*, the term for “being happy” that is used in daily conversation, is light and subjective in implication; *kōfuku*, the Japanese word corresponding to the English term “happiness,” is more long-term in orientation, and rarely appears in conversation but only in writing. In Cantonese, the term *hòisàm* is informal and casual in usage; semantically, it tends to be used to refer to relatively immediate periods of happiness. *Faailohk*, a more formal term, refers to somewhat longer-term forms of happiness, and *hahngfūk*, also more formal, corresponds to happiness as well-being. If these terms are used without considerable care in surveys, then their subtle semantic implications are buried, even though they will probably have at least some influence on respondents’ answers. The term “happiness” in American English is also problematic. “Happiness,” as Baumeister has pointed out, refers for many Americans to a current emotional state, rather than to a more enduring state of well-being or satisfaction in life (1991: 210). At the same time, however, when the

author of the Declaration of Independence declared the inalienable right to “the pursuit of happiness,” he clearly was referring to something more than short-term emotions.

This indicates that “happiness” and its equivalents in many of the world’s languages is ambiguous and multivocal; in English, to ask about happiness may for some evoke thought of a good meal, for others a nice car, for others a good marriage, and for others a good relation with God. These different forms of happiness are not the same thing, despite being covered by a common term, and the same may be the case for the equivalents to happiness in languages beyond English, although they may slice up the domain of happiness in different ways and view it from different angles. To the extent that happiness is physiological, it is universal, a universality based in the common structures of the human brain, as well the commonality of human physical needs and desires. But this common human physiology produces numerous different languages that divide up the world, and the world of happiness, in different ways. Without great sensitivity to languages and their differences, happiness cannot validly be cross-culturally compared. Researchers into happiness who are aware of these cross-cultural linguistic pitfalls may turn to other terms for their analysis, such as “subjective well-being” or “life satisfaction,” terms that are more experience-far and thus, perhaps, more comparable. But these efforts, while laudable, cannot solve the problem: every term one might use, translated into different languages, has particular nuances: fully transparent translation, enabling universal linguistic comparability without particular shadings, seems impossible.

Beyond language, there is also the cultural milieu of any given society. In their edited book *Culture and Subjective Well-Being* (2000), Diener and Suh present “cutting edge” research in psychology examining “subjective well-being” cross-culturally, through extensive cross-cultural survey instruments. “Why are North Americans happier than East Asians?” one chapter asks (Suh 2000: 64, 72) – assuming, by this very question, that the results of surveys reflect the underlying reality of happiness or its lack, rather than being the product of a survey and its culturally shaped responses. In fact, there are indeed cultural reasons why “North Americans are happier”; as Baumeister notes, Americans may “inflate their reports of happiness....Most modern Americans say they are very or extremely happy, and one must be skeptical about whether their lives are really so wonderful” as the quick answers they give to survey questions indicate (1991: 210). Indeed, in a society declaring in its founding document the inalienable right to “the pursuit of happiness,” one is culturally enjoined to pursue and proclaim one’s happi-

ness: it is almost as if one is “supposed to be happy,” and there is something wrong with a person who does not proclaim his or her happiness. In East Asian societies such as Japan, on the other hand, personal modesty is an ingrained social value – one is enjoined not to boast about one’s success in life or to declare one’s personal happiness. To proclaim one’s happiness, even in an anonymous survey, may be felt by some to be an affront to modesty. Thus it may well be that North Americans are not “happier than East Asians,” but are simply more willing to proclaim their happiness on a survey form. Broadly similar anthropological objections may be made about most statistical comparisons of subjective well-being between societies.

Veenhoven, at the conference upon which this volume is based, stated that in his own and others’ research on happiness, statistical analysis reveals that only a comparatively small degree of variation between societies can be attributed to cultural factors. While I certainly do not claim that culture is everything – it is one of a number of important factors shaping well-being in societies worldwide – to use survey results that may be culturally problematic to demonstrate that culture does not matter leads to the diminution of culture as a foregone conclusion. The situation is like that of the old joke about a man searching for his car keys at night. He is asked, “Where did you lose them?” and points into the blackness: “Over there.” “Well then, why are you looking for them here?” “The light’s better here.” This is not meant to denigrate Veenhoven’s work in any way – I have found his writings on happiness to be highly valuable in my own thinking – but only to suggest that the downplaying of culture in his and other sociological, psychological and economic researchers’ findings may not be valid, since the evidence used to dismiss culture may itself be culturally biased. In a broad sense, psychologists’, economists’ and sociologists’ research is becoming more sophisticated in its investigations; I am impressed by how much fuller than in the past their treatment of language and culture has become in recent years. However, as long as the cross-cultural questionnaire remains the primary instrument of research, then the problems we have been discussing will remain. This is not to say that the barriers between different languages and different cultures render all surveys of happiness irrelevant. This is only to argue that local context must be considered in order to fully understand happiness cross-culturally: How do people in a given locale conceive of happiness? Specific ethnographic data is required in order to make full sense of all cross-cultural statistics; the input of anthropologists, with their “local knowledge,” is necessary.

If scholars investigating happiness have until now not taken that “local knowledge” seriously enough, the obverse is also true: anthropologists have neglected the study of happiness. This has been analyzed in a recent paper by Thin, who asks “why on earth...are anthropologists so reluctant to address happiness?” (2005: 3). He provides several reasons. Most important is the cultural relativism that most anthropologists today reflexively adopt, making evaluation by definition impossible. If one is a cultural relativist, then it is impossible to compare societies as to the degree to which they enable their members to be happy; rather, each society can only be examined on its own terms. Other reasons include Western anthropologists’ naively positive views of the non-Western societies they study; there is also, paradoxically, an anthropological emphasis on suffering and ill-being far more than on happiness and well-being. Thin, criticizing anthropological relativism, laments that anthropologists have remained silent about a topic to which they could contribute a great deal:

Good friends are evaluative. False friends offer evaluations only in the form of flattery....If we fail to use our anthropological insights to promote happiness and prevent avoidable suffering, we are being unfriendly to humanity in general....I hope, therefore, that anthropologists will soon become much more interested in the analysis of happiness. I trust that in doing so they will come closer to meeting their evaluative responsibilities. (Thin 2005: 45)

Ever since anthropology’s emergence as a profession, spearheaded by Franz Boas, cultural relativism has been the dominant ideology of the discipline. As wrote Melville Herskovits, a leading mid-century anthropological theorist of cultural relativism, “there is no way to play this game of making judgments across cultures except with loaded dice” (1958: 270, quoted in Perry 2003: 169). But there has long been a minority of anthropologists who have not shied away from such judgment. One, of a number that might be cited, was Elvin Hatch, who argued for a humanistic principle that transcends cultural relativism: “We can judge that human sacrifice, torture, and political repression are wrong, whether they occur in our society or some other. Similarly, it is wrong for a person, whatever society he or she may belong to, to be indifferent towards the suffering of others” (1983: 135). Hatch acknowledges that his humanistic principle may be difficult to tightly define, but argues steadfastly for its existence, and for the moral necessity of applying it. Hatch and other anthropologists such as Edgerton

(1992) are writing about suffering rather than happiness; but Hatch's humanistic principle can apply to human happiness as well. Presumably there are principles of happiness that transcend cultural difference; the anthropologist's job is then to evaluate different societies as to how well they embody these principles, enabling their members to live happy lives.

However, such evaluation is dangerous, in that it is all too easy to proclaim as universal what are really no more than the values of one's own society. Evaluation must be done with great care to avoid ethnocentrism, the unwitting assumption of the universal validity of one's own unexamined cultural values; but nonetheless the points made by Thin and Hatch are valid ones. Anthropologists need to use their findings to try to promote happiness, as Thin argues; and anthropologists need to set forth a principle beyond cultural relativism in order to do this, as Hatch writes. But while both of these writers set forth general investigative principles, neither offers specific methodologies enabling cultural comparison. If anthropologists do not believe in the efficacy of cross-cultural questionnaires as to the measure of happiness, then what alternative methodologies can they offer? Up until now, most sociocultural anthropologists throughout the discipline's history have offered ethnographies of particular societies, which can be highly useful in providing the detailed local knowledge that cross-researchers often lack – although as Thin notes, such ethnographies have dealt with the topic of happiness only infrequently. But beyond ethnographies of particular societies, how can anthropologists engage in the cross-cultural comparison of happiness? Neither of these anthropologists can tell us.

I believe that anthropologists can indeed usefully compare cross-culturally different conceptions of happiness, and that this can be highly valuable;<sup>1</sup> but this does not get at the essence of much of what happiness researchers pursue, the comparison of societies and individuals as to how happy they are. This seems fundamentally problematic, in that we cannot ethnographically compare happiness as experienced – we cannot get inside other people's minds, to feel the world as they feel it; this is blocked from us both personally and culturally. Anthropologists, again, may compare conceptions of happiness, but not the experience of happiness. Getting at other people's experience of happiness – feeling the world as they feel the world – seems impossible, not just because of methodological obstacles, but more, because of the very nature of being human: we are largely trapped in our own selves.

I see no way around this problem. However, in my own research over the past eighteen years, I have found that there is indeed a way to compare individuals and societies, not in terms of happiness, but in terms of “that which makes life worth living”; this enables the comparison of individuals and societies without having to try to fully comprehend the intangibles of individual subjectivities. People’s senses of “what makes life worth living” are no doubt a key factor in their personal happiness, and by studying these senses we can compare individuals in relation to their social worlds in different societies, as I will now show. What I seek to offer, in short, is an alternative to the statistical comparisons of happiness offered in many of the other chapters of this book – a comparison of “what makes life worth living” based not on individuals’ reports as to their inner feelings, but rather on their perceived relation to their social worlds.

### **“That which makes life worth living” and its cross-cultural comparison**

My research has been based on the Japanese term *ikigai*, defined in Japanese dictionaries as “something to live for; the joy and goal of living.” This definition contains two related concepts, the feeling that one’s life is worth living (known in Japanese as *ikigai kan*) and the entity in the world that makes one’s life worth living (known as *ikigai taishō*: see Kamiya 1980: 15). The former concept, the feeling of *ikigai*, very much relates to the feeling of happiness, and like happiness, it cannot unproblematically be comprehended and compared by the outside observer. The latter concept, the object of *ikigai* (most often, in Japan, one’s work, family, or dream) may be thought of as the entity in the social world that most enables one to feel that life is worth living; this can indeed be comprehended and compared, since it is not solely inside the self, but is a matter of the self within its social world.

The term *ikigai* apparently exists only in Japanese,<sup>2</sup> but the concept seems cross-culturally applicable, as I have found from my own research (Mathews 1996), and as Japanese analysts have found as well (Takahashi and Wada 2001): people throughout the world have, it seems, a sense of what most makes their lives worth living. Some activities in our lives we pursue because they are sources of pleasure and happiness in themselves – whether a child’s play in the sandbox or an adult’s watching an absorbing movie. However, much of our lives – whether being squeezed into a train or stuck in a traffic jam on a commute, or engaged in drudgery at the office or routine housework at home – we can hardly

characterize as “happy.” We put up with such drudgery because of a larger sense of what we really live for, whether that be the love of one’s spouse or child, a sense of duty to God or country, or the dream of a different, better life. Perhaps some people can be happy without such a larger sense of meaning,<sup>3</sup> but for most of us, *ikigai* is an essential, perhaps the most essential, aspect of happiness. *Ikigai* is not itself happiness, but is a crucial part of happiness. However, because it has a double meaning, as both the feeling that one’s life is worth living and the object that makes one’s life worth living, it is amenable to detailed cross-cultural comparison in a way that happiness itself is not. Happiness, and the feeling of *ikigai*, once again, are inner states that can’t unproblematically be compared; but the object of *ikigai*, and how it is comprehended, pursued, and maintained, can indeed be cross-culturally compared, as I will shortly discuss.

*Ikigai* can fully be understood not through statistics, through which it is impossible to measure,<sup>4</sup> but rather by interviewing individuals for many hours about all aspects of their lives. My research initially involved comparing Japanese and American senses of *ikigai* (Mathews 1996). I interviewed in 1989–91 102 Japanese and Americans, asking them about their work, family and friends, the story of their lives up to the present, and their future dreams, hopes, and fears as well as their religious beliefs; these interviews took place over 2–4 meetings over 4–10 hours. Only after our discussions were almost completed did I broach *ikigai*, asking, “What’s most important to you in your life? What’s your *ikigai*?, and sometimes, “After all you’ve told me, it seems that XXX is most important in your life/is your *ikigai*. What do you think?” In this way, I could avoid abstract philosophizing and could tie what my informants specifically described about their lives to their *ikigai*. In the years since these interviews, I have conducted follow-up interviews with some of these people, and my students and I have collected a range of 84 interviews with Hongkongers as well. These have been shorter, 1–3 hours over one to two meetings, but have followed the same interview sequence as outlined above. This method is by no means perfect – the only way to unmistakably understand my informants’ *ikigai* would be to live with them for months and years – but is realistically the best that can be done.

There are problematic aspects of using *ikigai* as an analytic tool. Does everyone have an *ikigai*? Most adults apparently do, or so my own and others’ research has indicated (Mathews 1996; Takahashi and Wada 2001: 160–214); but people can live without *ikigai*, most no doubt unhappily. Do people have just one *ikigai*, or can they have several?

Some people I've interviewed do indeed seem to have a balance of several different *ikigai* in their lives; but often, once a series of dilemmas are set before them (for example, "You say that your *ikigai* is both your religious belief and your husband. But what would you do if your husband said he no longer believed in religion? What would you do if you had to choose between him and your church?"), a single *ikigai* emerges. To what extent does *ikigai* change? *Ikigai* does change over the lifecourse, for example, when one falls in love, has children, or retires; but it is relatively stable. The majority of people locate *ikigai* in their future dreams when young, and in work or family in their prime of life; sustaining these *ikigai* may become problematic for some in old age. When *ikigai* is understood this way, it becomes clear that it exists not simply within individuals' minds, but within their social worlds: *ikigai* can only be fully understood within its social context.

In this paper, rather than compare individuals, I compare three societies as to the *ikigai* their members hold. The *ikigai* of men and women in the prime of life (age 25–60) whom we interviewed tended to be work and family. In Japan, twice as many women as men found *ikigai* in family; in Hong Kong and the United States there was no appreciable difference between men and women in this regard. This is because many people in Japan are pushed by Japanese social and institutional structures to adhere to a gender-role division of *ikigai*, of "men living for work and women for family," more restrictive and encompassing than that commonly practiced in the United States and Hong Kong. Japanese men, especially those in companies, may continue to have difficulty finding time to devote to their families (Mathews 2003).

Another difference concerns religious belief. Some 20% of the Americans and Hongkongers interviewed found *ikigai* in their religious belief, most often Christian; of the 50 Japanese interviewed, only a few found *ikigai* in religious belief (in religions such as Sōka Gakkai).<sup>5</sup> Thus, unlike Hongkongers and Americans, Japanese tended to show a more marked gender division in *ikigai*, with men gravitating towards work and women towards family, and tended not to find *ikigai* in religious belief. This may reflect the tendency in Japan to find one's deepest meaning within a defined role in one's primary this-world social group (see Lebra 1976: 67–90). All in all, as we will see, Hong Kong tends to be between the United States and Japan in its *ikigai* formulations: Hong Kong resembles the United States in the realm of work as *ikigai*, and resembles Japan in the realm of family as *ikigai*.

In order to more fully set forth a societal comparison of *ikigai*, we need an explicit theory:

On the basis of culturally and personally shaped fate, individuals strategically formulate and interpret their *ikigai* from an array of cultural conceptions, negotiate these *ikigai* within their circles of immediate others, and pursue their *ikigai* as channeled by their society's institutional structures so as to attain and maintain a sense of the personal significance of their lives. (Mathews 1996: 49–50)

Let me briefly explicate this theory in terms of our three societies. “On the basis of culturally and personally shaped fate...” Leaving aside personal fate – the “luck of the draw” that determines whether each of us is born rich or poor, handicapped or healthy, from happy or from dysfunctional families – Japanese, Americans and Hongkongers are raised within their different sociocultural worlds. We can never escape our native languages, and how they shape the way we experience the world. The Japanese I interviewed inevitably used language expressing social hierarchy – it's impossible to speak Japanese without expressing social hierarchy, unlike English and Cantonese – and this subtly but inevitably shaped the thought processes of the Japanese I interviewed, as opposed to the Americans and Hongkongers. The “individualism” of the United States and the “groupism” of Japan are clichés (see Lebra 1976, Bellah *et al.* 1985, Mathews 1996), but most individuals in these societies are more or less so molded, and reshape their societies' institutions in accordance with how they have been molded. Beyond this, the ongoing course of history shaped the cultural fate of my informants: Japan's defeat in World War II and extraordinary rise to wealth through the 1980s, and stagnation since, the United States' 1960s turmoil and 1970s rise of feminism, and the upsurge of evangelical Christianity in the 1980s and 1990s, and Hong Kong's own extraordinary economic rise in the 1980s and its return to China in 1997 – all of these formed a historical backdrop to the lives and *ikigai* of my informants, and sometimes shaped *ikigai*. I interviewed Japanese who had family members killed in the 1940s, and who were amazed to find themselves rich in the 1980s, Americans who got divorced in the 1970s and found Jesus in the 1990s, and Hongkongers who in the years after 1997 began to love their country, China, bit by bit.

“Individuals strategically formulate and interpret their *ikigai* from an array of cultural conceptions...” While there are only a few *ikigai* commonly held in the contemporary world – work, family, dream, religious belief, and creative endeavor – there are a wide variety of cultural formulations of *ikigai*. One's *ikigai* of work, for example, can be justified in terms of the salary one earns, as is often the case in Hong Kong, in

terms of the self-fulfillment that it may bring, as is often the case in the United States, or in terms of one's commitment to one's work group, as is often the case in Japan. These are stereotypes – all three justifications can be found in all three societies – but these do reflect dominant discourses within each of these societies.

For some people we interviewed, their formulations of *ikigai* come from beyond their own society – one may formulate and justify one's *ikigai* from an array of mass-mediated forms from the world over. I interviewed a Japanese executive who described her *ikigai* in terms of French existentialism, an American Catholic nun who engages in Buddhist meditation more than prayer, and a middle-aged Hong Kong rock musician who lived for the music of Deep Purple. However, there clearly are dominant cultural formulations in different societies, for example, patriotism for older Americans and feminism for younger ones. An American in his seventies said, "I got into the service because that was the patriotic thing to do, all the guys I grew up with did. Of course I believed the American Way was best. We were going to make the world safe for democracy, whatever the hell that was. The Japanese and Germans were sons of bitches; we were out to get them." An American real estate agent in her twenties said, "Women my age were taught that career comes first, you're in competition with men and with your fellow women to see who comes out on top." These quotations reflect inescapable cultural attitudes of their time. Of course, in open societies, mass media offer multiple conflicting voices, that may help to shape *ikigai* in multiple, conflicting ways, but there are certain dominant cultural attitudes that, in a given era, are unmistakably American, Japanese, or Hongkongese.

"...Negotiate these *ikigai* within their circles of immediate others..." Social negotiation of *ikigai* takes place constantly, although it may not be recognized as such. When a lover says to another, "Do you love me?", this is a question about *ikigai*: "Am I the most important person in your life?" When a coworker says, "Are you going home now?", this too may be a question about *ikigai*: as if to say, "I'm still working. Why the hell aren't you?" This kind of *ikigai* negotiation is subtly ubiquitous in all three societies. A Japanese banker said, "I want to get promoted; I want status; that's why I work so hard....When I meet someone with high status I think he's great; I want to be treated like that; but no, I'm not treated that way yet..." A young Hong Kong investment broker said, "Every week we go over the figures: you can see who's doing well and who's doing badly. It's really embarrassing....I'm trying as hard as I can, but the figures don't show it..." An American jazz musician

exclaimed, "When someone says to me, 'Oh, is music your hobby?' I get pretty pissed off; I'm a musician, an educated, highly-qualified player with a lot of reputation!... Yes, it's true that I'm an office worker who plays trumpet on weekends. But I have to do that because of the awful state of culture in our country!" All three of these comments show individuals defending a professional *ikigai* against the implicit or explicit claims of others, an *ikigai* that they may or may not be able to fulfill in their lives.

Such *ikigai* contestation is apparent not just in the professional world of work, but also in the intimate world of home. A young Japanese divorcee recounted how, "After we got married, we each wore a wedding ring, but he stopped wearing his; he said, 'I'm a man, and I don't like that kind of thing. I've worn it for a year. A year's long enough, isn't it?' I wondered if he left his ring at home so that he could say that he wasn't married..." An American mother discussed her difficulties with her daughter: "Leslie will say, 'You don't like me.' I tell her, 'Now I don't like you. I love you, but I don't like your actions – they really upset me.' The two of us get in these screaming matches." A young Hong Kong woman tearfully described that she found out her father had a mistress across the border in China: "I can't believe it!... Now my mother wants a divorce: I'm afraid that my family will end..." In all three societies, female informants have told me that "there's a kind of war that goes on between women and men." In each society, *ikigai* negotiations within the family take subtly different forms. In the United States, as Hochschild (1989) has explored, the struggle is over gender roles that have been largely transcended at work, but that remain strong at home, with working women still doing the lion's share of the housework and childcare. In Japan, separate gender roles remain more entrenched; men in particular may refuse to transcend these roles, to "live for family" (Mathews 2003). In Hong Kong, the ready prevalence of "second wives" for men, especially working-class men, over the border in China creates a high degree of gender tension. On the other hand, in a middle-class context, there is the availability of foreign maids, which in effect frees wives to largely live for work, leaving the tedium of housework and childcare to hired help: There are stories in Hong Kong of small children confusing their maids and their mothers, inconsolably crying "Mommy! Mommy! Come back!" when a maid's contract ends and she leaves.

"...and pursue their *ikigai* as channeled by their society's institutional structures..." One clear institutional structure is that of employment. In both the United States and Hong Kong, there is considerable mobility

of employment – people often change jobs and careers. In Japan, for white-collar workers employed by large companies, lifetime employment remains more or less the norm. This institutional structure does not allow for flexibility, with profound effects on the potential explorations of *ikigai* that many young Japanese may undertake: young Japanese have a narrow window of just a few years within which to pursue career-track employment, after which the window closes and it becomes all but impossible. As one young Japanese bank employee told me: “I didn’t want to become a salaryman, and thought about doing something else, but I got scared; there’s too much risk involved....I feel I made a terrible mistake, but I’ll stick to this job; I have no choice.” Increasing numbers of young Japanese are today choosing not to enter career-track employment, becoming temporary workers instead, a choice that may keep them from career-track employment for the rest of their lives (Mathews 2004). Another example of institutional channeling concerns gender. Aside from the fact that women’s wages as compared to men’s wages are lower in Japan than in Hong Kong or the United States, there is also the fact that Japanese tax laws discourage two spouses from having careers, thus “encouraging” married women not to work full-time (Mathews 2003: 216); Hong Kong immigration laws, on the other hand, allow for the employment of some three hundred thousand Filipina and Indonesian maids in Hong Kong, thus “encouraging” Hong Kong middle-class women to devote themselves to their careers (see Constable 1997). These institutional structures do not determine *ikigai*, since individuals who are sufficiently motivated can overcome them; but in large scale, they definitely serve to shape the *ikigai* of the members of a society.

“So as to attain and maintain a sense of the personal significance of their lives.” The pursuit of significance takes place throughout the life-course, as Becker has poignantly illustrated (1971: 65–74); in my interviews I saw this among young and old, both as the regret of those holding no dream and the ambition of those with a very big dream. A young Hong Kong office worker said, “If I knew what I really wanted to do in life, that would be great. I wish I had a big dream, but I just don’t...” A middle-aged Japanese company worker said, “I envy those who know what they want to do in life; I didn’t have anything I really wanted to do – that’s why I became a salaryman...” A young American stockbroker said: “One thing I regret about my life is that I think life is a beautiful, passionate experience, but I forget that: I work with numbers, holed up here in my office...” These people all seem to echo the well-known Peggy Lee song: “Is that all there is?” On the other

hand, a young Hong Kong designer has kept his dreams of significance vast, if almost certainly unrealizable: "I want everyone in the world to see the designs I've created! Whether they like it or not is up to them: but I want them to see what I've done!" As a person ages, significance may become a less burning concern, since one can see "how you've done in life" (see Brim 2000). But sometimes the significance of one's life may be wholly swept away. As a failed American businessman in his sixties said, "My son told me in a letter that I'd been a total failure in my life....People commit suicide when they become convinced that the world would be better off if they weren't here. You get knocked down, pick yourself up, get knocked down again – by the twenty-fifth time..." Fortunately, he was able to pick himself up once again.

The pursuit of significance is universal, but there are particular forms that this pursuit takes in different societies. I earlier mentioned three ways in which *ikigai* as work may be formulated in the United States, Hong Kong, and Japan; these reflect larger cultural shapings of significance. Baumeister (1991: 365–70), among other analysts, has written of "the glorification of selfhood" in the American pursuit of life meanings: work and family have both eroded as ultimate values, and so self and self-fulfillment become the bastion of value, with work and family justified only to the extent that they fulfill the self. This was readily apparent in many interviews. In Hong Kong, gaining success in terms of money (Mathews and Lui 2001: 10), against a backdrop of family and familial loyalty, is the ultimate goal of many people's lives. This makes sense; in a society of refugees from war and revolution (in China), money and family are all that can be trusted. Hong Kong's civic values, of rule of law and governmental stability, are important, but can serve as no ultimate security, given an uncertain new world of linkage with China. In Japan, the ultimate valuation of one's group remains paramount, at least as embodied in Japanese institutions; but in an age of economic downturn, the ideology of "surrendering self to group" has for many lost its justification and meaning.

The foregoing illustrates how *ikigai* may be understood not simply as it exists inside people's heads, but also as it exists in the social world; *ikigai* cannot be fully understood apart from consideration of its cultural formulation, social negotiation, and institutional channeling. This is because *ikigai* is not individual but social – it comes from the world of others, and must be understood accordingly. But while the theory outlined above enables us to understand *ikigai* in its social context, it does not enable us to comparatively evaluate *ikigai*. In the remainder of this paper, let me attempt such an evaluation.

## Evaluating “What Makes Life Worth Living” in individuals and societies

Anthropologists, as noted in the first section of this paper, are deeply attached to relativism, and, unlike economists and psychologists in happiness studies, tend to distrust the cross-cultural comparison and judgment of individuals or societies. However, as we earlier discussed, this may be a fundamental weakness of anthropology; in order to make a full contribution, it seems necessary not to simply describe how different societies structure the pursuit of *ikigai*, but also to evaluate these societies. In the previous section, I largely avoided evaluation, saying nothing about which *ikigai* seemed best and most enduring, and which societies are best at enabling the maintenance of *ikigai*. However, having done research on *ikigai* for many years, I have, I think, gathered enough information and insight to evaluate *ikigai*. Let us now compare the most common *ikigai* in these three societies.

Work as *ikigai* is precarious, partly because much work involves alienation – one is likely to be working at tasks that do not fully utilize one’s abilities, for the sake of someone else’s profit, and living for such work can be dangerous if one lifts one’s nose from the grindstone. A Japanese company worker told me, “Do I feel like a cog in the corporate machine? Well, of course I’m a cog...what I’m doing could be done by others just as well as by me – but while I’m working, I believe that without me the bank couldn’t survive. As long as you work, you’ve got to believe that” (Mathews 1996: 58). He has to engage in a sort of willed false consciousness to justify his *ikigai* to himself. This sense of false consciousness is particularly prevalent in Japan, where even now – although this is by fits and starts changing – company workers are enjoined to feel corporate loyalty, and to make that the basis of their *ikigai*, even if many don’t. In the United States and Hong Kong, where workers are more likely to pursue meaning in terms of personal fulfillment or salary earned, this particular type of false consciousness is a little less prevalent. However, in all three societies, one’s work is likely to end long before one’s life ends: even if one does successfully manage to live for work, one may get fired, or be forced into retirement. This was expressed most extremely by a Japanese salaryman, who, despite complaining about being exploited at work, stated: “I’ll feel lonely when I retire; I have to learn to endure loneliness, being separate from an organization, and face myself. I’ve got to learn to accept the fact that I won’t have my job, my purpose in life, anymore.” If a person can find a secure job that uses one’s full capacities and that

one believes contributes to the public well-being, and if one can work at that job until one feels ready to retire, then that work can indeed serve as *ikigai*; but not many of us are fortunate enough to find such work.

Hong Kong and the United States today seem more suitable than Japan in enabling work as *ikigai*, largely because of Japan's ongoing economic doldrums. Hong Kong and the United States both enable workers to change jobs and thus pursue their own path in life, whereas Japan, among white-collar workers even today, discourages such job movement. In Japan's high-growth era of 1960–90, the ideology of "company as family" was not all that far from reality, in that workers were scarce enough so that companies had to treat their employees very well. For white-collar workers enjoying "lifetime employment" (which always was, however, a minority of Japanese workers), the ideology of "company as family," justifying one's company as one's *ikigai*, was more or less effective. Today, however, that day is past (see Genda 2001), and the earlier ideology seems more of an empty shell: companies no longer have the leeway to treat their employees as well as they once did. However, it is probably safe to say that all three societies work as *ikigai* embodies a degree of false consciousness.

There is considerable confusion in all three societies as to whether family or work is one's *ikigai*. It is "politically correct" in the United States and in Hong Kong, if not necessarily Japan, for workers to say that "my family is most important to me," but in fact it may be work, as some of my interviewees reluctantly admitted. An American businessman in his sixties who had weathered a bitter divorce said, "The family feels that I abandoned them for work....Maybe work really has been most important to me. Work, for me, was not just a matter of money, but a means of participating in life – that was my greatest drive..." An American teacher in her thirties said, "Which is most important to me, my work or my family? I have this nagging feeling of what the answer should be – it should be mother, but it's terrible, I think I put teacher first. Who I am is most essentially what I get from my job." In Hong Kong, few interviewees emphasized the feeling of significance they derive from work; rather, it is for them a matter of money to support family. As a middle-aged businessman put it, "My family is more important than my work. But it's because family is so important, that I have spent so many hours at work. I work so hard because of my family." A story making the rounds in Hong Kong is of a young boy saving money in the mistaken belief that if he could pay his father's wages for an hour, he could buy an hour for his father to

spend with him instead of being off working. The father's *ikigai* may indeed be his family, but the son longs for his father's presence rather than his money.

Family as *ikigai* may not embody false consciousness in the same way that work may, in that presumably no one is a faceless, replaceable cog within her or his own family. But family as *ikigai* does carry its own distinct insecurities. We need to distinguish between two components of family as *ikigai*: one's spouse and one's children. Children represent an *ikigai* that one is supposed to release after a certain point – as parents in all three societies told me, “my kids will have their own lives to live” – while spouse as *ikigai* is ideally supposed to remain “until death do us part.” But both of these carry difficulties. As for children as *ikigai*, surveys of happiness conducted in the United States show that during the two decades or so during which one has children at home, happiness is actually diminished: people on average are less happy during the years they have children than they were before they had children and after their children left home (Baumeister 1991: 161). There are various ways to explain this, but one obvious factor is that in capitalistic societies, one is paid for working and rewarded in other ways as well (Hochschild 1997), but one raises children as its own reward, and for many this may not seem very rewarding. I cannot find comparable statistics on happiness of those with children at home for Japan and Hong Kong, but it is surely significant that both societies now have fertility rates below the replacement level: Japan now has an average of 1.32 children per family, and Hong Kong, with the lowest fertility rate in the world, has just 1.00 (*Economist* 2003: 16).

About a fourth of the people we interviewed in all three societies said that the primary locus of their *ikigai* was their spouse. Unlike both work and children as *ikigai*, one may, with luck, hold one's spouse as *ikigai* as long as one lives, but of course when one spouse dies, the other tends to be left alone. In one older American women's words, “What would I wish for at this point in my life? That I'd die first! I wouldn't want to be left alone without William” (1996: 163). In the United States, many marriages end long before this point, through divorce, with some half of marriages ending in divorce; Hong Kong's and Japan's divorce rates are both at 1.8 per thousand people, while the United States has the highest in the world, at 4.7 per thousand (*Economist* 2003: 85). It may be that Americans are less satisfied with a less-than-perfect marriage than are Hongkongers and Japanese; but divorce often leaves unhappiness in its wake, particularly when there are children left behind, and in this sense we can say that the United

States is more precarious in preserving *ikigai* as found in marriage and family than are either Japan or Hong Kong. In our interviews, once I accounted for cultural differences in expression,<sup>6</sup> I was unable to sense any appreciable difference in depth of love for spouse in these three societies; on the other hand, I found that a number of American interviewees were unable to say why exactly their divorces took place. It may be that they were leery of explicating personal failure; but it may also be that they themselves didn't know: simply, their marriage somehow wasn't enough to provide the happiness they sought. In this respect, it seems that even though some Americans may find elusive happiness in second or third marriages, all in all, family as *ikigai* seems more sustainable in Japan and Hong Kong than in the United States. In all three societies, pressure on wage-earners to devote themselves to work is extraordinary – all three societies rank near the top of the world statistical charts in the hours per week spent at work. In this sense Western European societies, with fewer work hours, may be superior in sustaining *ikigai* as family than any of these three societies, in that in all three societies wage-earners may not have the time to devote to family.

A number of those we interviewed found *ikigai* in dreams of various sorts. For young people, since they haven't yet fully entered into the adult world, dreams of their future may be their predominant form of *ikigai* in all three societies: their dream of a bright future that may or may not be realized. For those who have entered the adult world, dreams in all three societies take on various profiles. There are *ikigai* dreams that, as one grows older, seem less and less likely to be realized. The middle-aged painters and musicians and writers I interviewed sometimes clung to such dreams, in that the modest success of their arts in actual life has not matched their earlier hopes. Other *ikigai* dreams are purely vicarious, like the dreams expressed in the famous short story, "The Secret Life of Walter Mitty"; these may be indirectly seen in devotion to a television program or a pop singer, as some of my informants discussed. And finally, there are *ikigai* dreams of what might have been but was not in one's life. This was heartbreakingly expressed by an elderly Japanese man who said, as the last words of our interview, "There's one thing I haven't told you. When I was eighteen, I taught at an elementary school as a substitute teacher, and there was a beautiful young teacher there. It was during the war, and of course I couldn't say that I loved her – I wrote her a letter once or twice. But she got married soon after that, and I got married too....She died of tuberculosis a few years later. I still keep her photograph in my desk

drawer. Sometimes, every now and then, I take it out of the drawer and look at it..."

In terms of the possibility of dreams coming true, Hong Kong is perhaps best-positioned of any of these three societies. Li Ka-shing, Hong Kong's richest man, never attended higher schooling of any sort, and "the Hong Kong dream" remains, that through hard work, one may become successful and wealthy. The students I teach in university almost as a rule are the first generation in their family to go to university: they will indeed probably be better off than their parents. The United States is in second place: although by many accounts, social class has hardened and social mobility has shrunk in the U.S. as compared to decades ago, there is still a large degree of societal freedom, enabling the pursuit of dreams. Japan is in third place: although Japanese society is changing, and although more than in the recent past, dreams may be pursued outside of established institutional structures, still, those structures, in all their constraining power, remain in place. Paradoxically, however, it may be that dreams "work better" in Japan, where they probably won't come true, than in the United States and Hong Kong. In the latter two societies, one's failure to achieve dreams cannot so easily be blamed on the structures of society – rather, the failure is one's own fault.

All of the *ikigai* discussed so far are provisional, based in this fleeting world alone. Religious belief as *ikigai* provides an enduring meaning of life that these other *ikigai* cannot fully provide. If these other *ikigai* are "this world" in focus, religion may provide an explanation for life that goes beyond the here and now. Those who have a strong religious belief tend on average to be happier than those who do not, many studies have shown. But then, why do more people not believe in religion? The biggest reason is that while religion, once it is believed in, may provide an ultimate meaning, it is rendered inherently doubtful by the multiplicity of views that exist today. If the people around one believe in different religions, or in no religion at all, how can the believer be sure that she's right, that she's not merely fooling herself? Among the people I interviewed, Japanese were the most inherently skeptical, with the large majority of those I interviewed having doubt about life beyond the grave. As one young woman said, "When I go and visit my grandfather's grave, I guess we don't really communicate, but in front of his grave, I do sincerely talk to him.... Maybe it's just a monologue." This contrasts with the greater degree of certainty many of the Americans I interviewed felt: "Yeah, I think God knows what I do each day. That's really hard to grasp. Rationally, I'd probably say,

‘no way,’ but I really do believe He knows.” In the United States, a few admitted to out-and-out non-belief, and more expressed a subtler degree of skepticism, but a large minority expressed no doubt as to the existence of God in their lives. Hongkongers, apart from Christians and a minority of informants expressing belief in reincarnation, seemed generally to believe that nothing happens after one dies. Hong Kong in this sense resembles Japan more than the United States; however, as earlier noted, because Hong Kong Christians tend to be quite devout, among my informants as many Hongkongers as Americans found *ikigai* in their religious belief.

Clearly, different societies have different degrees of belief, and different degrees of social impediments to belief – to a very broad extent, the more others in society believe, the easier it is for oneself to believe, since there are fewer skeptical voices around one. In this sense, the United States seems most supportive of an *ikigai* of religion, with Hong Kong in second place, and Japan a distinct third. In the United States, transcendent religion is readily apparent in society. Outsiders may look askance at the religiosity of the United States, seeing a link between religiosity and the self-righteousness of American attitudes towards the rest of the world; but in any case, both statistics and my own interviews indicate that American religiosity creates a remarkable sense of assurance as to the purpose of one’s life, that anchors *ikigai* and provides ultimate meaning. Because in Hong Kong and Japan there is less of a societal consensus as to religious belief, it is harder to be religious without a distinct conscious decision, one that may separate the believer from non-believing friends and family.

Do some societies enable the pursuit of *ikigai* more than others? Clearly this is the case. The three societies we have examined are similar in their affluence and in the freedom and rule of law they provide; all three provide more opportunities for the pursuit of *ikigai* among their citizens than citizens of many of the world’s other societies. Yet, even within these three societies, distinct differences are apparent. Japan does not appear to be as effective as the United States and Hong Kong in providing justification for an *ikigai* of work – this was probably not the case twenty years ago, but in Japan’s recent economic downturn, it has become the case. The United States does not appear as effective as Japan and Hong Kong in enabling the *ikigai* of family. Hong Kong appears most effective, the United States second, and Japan distinctly third, in enabling *ikigai* dreams to attain fruition. The United States is most conducive to finding meaning in religion, with Hong Kong second and Japan third. Taking all these different pursuits of

*ikigai* together, I judge that Hong Kong today is somewhat more conducive to the pursuit of *ikigai* than is the United States; both these societies are more conducive to the pursuit of *ikigai* than is Japan. The most important factors shaping Hong Kong's top position are that 1) Hong Kong's social and economic mobility remains widespread, unlike Japan and the United States, enabling individuals to aspire; 2) institutions allow considerable personal choice in the realm of careers, like the United States but unlike Japan; 3) families remain stable, like Japan but unlike the United States, and 4) the *ikigai* of religion remains fairly widespread, like the United States but unlike Japan, making plausible a belief in ultimate meaning if one so seeks it. These comparisons are partial, of course – I would need far more data to make them conclusive – and millions of individuals in all three societies do not fit within this neat comparison. Hong Kong also retains some distinct markers of societal unease, not least the fact of having the lowest birthrate in the world. And yet, despite all these qualifications, I stand by the results of this comparison.

We discussed in the first section of this paper how researchers on happiness and subjective well-being have tended to find that “East Asians are less happy than Americans”; I argued that without a full consideration of cultural and linguistic context, this conclusion was doubtful. In the second and third sections of this paper, we have examined *ikigai* at length, considering Japan, the United States and Hong Kong in terms of *ikigai* theory, and then in terms of the different kinds of *ikigai* they offer their citizens. This discussion has led to a different conclusion than that of the researchers into happiness. My conclusion remains tentative. But in closing, I argue that the kinds of detailed examination of individuals within their social and institutional worlds that I have offered in this paper may be useful for broadening and deepening the work of happiness researchers. The scholarly “pursuit of happiness” can only remain elusive without a detailed understanding of social and cultural context, such as I have tried to provide in this paper in its examination of *ikigai*.

## Notes

- 1 For a fuller examination of anthropological perspectives on happiness and well-being, see the forthcoming edited volume, “*The Good Life*”: *Well-Being in Anthropological Perspective* (Mathews and Izquierdo forthcoming). My own chapter in that volume examines from a different angle the research discussed in this chapter.
- 2 There is a similar term in Korean, but it does not have the everyday salience that *ikigai* has in Japanese (Mori 1999). French terms such as *joie de vivre* and

- raison d'être* also bear a similarity to *ikigai* (to *ikigai kan* and *ikigai-taishō*, respectively) but seems more philosophical in nuance than is *ikigai* (Kamiya 1980: 14–15). There may perhaps be an equivalent to *ikigai* in some language in the world, but I have yet to find such an equivalent.
- 3 After I gave a talk on *ikigai* in the United States a number of years ago, a young woman commented, “Who needs *ikigai*? I wake up every morning and feel overjoyed to be alive. I don’t need to have any particular thing in my life that I live for.” If she can indeed feel such joy in life itself, then perhaps she has no need for *ikigai*. Some Buddhist masters I have known of do not seem to need to compartmentalize their “reason for being” as *ikigai* seems to require. But most of us do not live on such an exalted plane, and without *ikigai*, life may seem meaningless and joyless, my research has indicated.
  - 4 Many Japanese newspaper articles and scholarly books do indeed offer statistical surveys as to *ikigai*. These are problematic, however, in that many Japanese can’t answer the question “What’s your *ikigai*?” when asked out of context; thus some surveys have provided lists of *ikigai* for respondents to choose from, rendering the exercise of dubious validity.
  - 5 A majority of Americans are Christian, but many of the believers I interviewed felt that their religion was the spiritual backdrop to their lives rather than what was most important to them in their lives. On the other hand, only about 20% of Hongkongers are Christian, but those who are tend to make their religion their *ikigai*. This is probably linked to the fact that most Hong Kong churches are fundamentalist, as is not the case in the U.S.
  - 6 In the United States, discussion of love is far more likely to take place than in Hong Kong and particularly in Japan, where expressions of love for one’s spouse are often made obliquely, even if that love is unquestionably present.

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# 8

## Psychological Approaches to the Relationship between Happiness and Public Policy in P.R. China

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### Introduction

For years, public policy has focused on reducing and repairing aspects of society such as urban blight, crime, pollution, traffic congestion, etc. However, it became increasingly obvious that the society could not flourish by focusing only on eliminating these deficiencies (Kretzmann & Mcknight 1993). Such a course will only make the society fragile and vulnerable to the adverse situations such as external shocks, turbulence and crisis. Instead, helping society develop the capacities to be resilient, prosperous and happy will bring longer-term benefits (Benson 1997; National Research Council 2002; Carruthers & Hood 2004).

On the other hand, the strong emphasis on the material wealth nowadays substantially distorts what a society really values (Diener & Seligman 2004), and people tend to forget such important needs as being loved, having a sense of belonging, wisdom, self-esteem, and self-fulfillment, which are all crucial to happiness. Reorienting society's path of development help to avoid conditions, such as alienation between the more and the less fortunate, increasing selfishness, chaos and despair, and bring about real progress to happiness for all.

### 1 Positive psychology

Psychology has, since World War II, become a science largely about healing, and it concentrates on repairing damages to human functioning. This almost exclusive attention to pathology results in a model of the human being lacking the positive features that make life worth living (Seligman & Csikszentmihalyi 2000), and neglecting the positive side of people's life, namely happiness. However, as a reduction of negative deficits does not automatically result in the ability to tackle future

problems and an increase in positive assets (Lykken 2000), it is important and constructive to exploit human being's potentials and cultivate positive characters (e.g., flexibility, resilient, optimism, hope, wisdom, rationality, creativity, self-determination, etc.) to enhance their capacities (Hood & Carruthers 2002). Only in this way will people not be frail and passive when they are confronted with adverse situations, but instead be resilient and able to thrive in the face of disasters, and to achieve higher goals and lead a happy life.

Accordingly, in response to the limitation of the old disease model of psychology, positive psychology, as a new paradigm (Seligman 2002), begins to catalyze a change in the focus of psychology from pre-occupation only with repairing the worst things in life to also building positive qualities. The field of positive psychology at the subjective level is about valuing subjective experiences: well-being, contentment, and satisfaction (in the past); hope and optimism (for the future); and flow and happiness (in the present). At the individual level, it is about positive individual traits: the capacity for love and vocation, courage, interpersonal skills, aesthetic sensibility, perseverance, forgiveness, originality, future mindedness, spirituality, high talent, and wisdom. At the group level, it is about the civic virtues and the institutions that move individuals toward better citizenship: responsibility, nurturance, altruism, civility, moderation, tolerance, and work ethic (Seligman & Csikszentmihalyi 2000).

## **2 Three functional areas of public policy**

Public policy, as an instrument of government to enhance the capacity of the society to obtain happiness, covers three functional areas: policies on economic/material enrichment to support the basic needs of people for life, policies to strengthen the resilience of individual, family, community and society to destructive factors and adverse situations which impair the harmony of society and hold back its development, and finally policies to facilitate the positive factors which could promote and enhance the happiness/well-being of people in the long term.

To the countries with a developed economy such as the USA, the major mission of public policy should not be material enrichment but should rather be meeting the advanced needs of its people and enhancing virtue, spirit, and culture. For example, although economic output has risen steeply over the past decades in US, there has been no commensurate rise in life satisfaction in this period, and there has been a substantial increase in depression and distrust (Frey & Stutzer 2002).

For less developed countries such as those in East Africa, the primary mission of their public policies might still be exclusively in the first functional area. Because the basic needs of its people, sometimes even the fundamental survival need, remain difficult to manage, fulfillment of advanced needs such as vocation, aesthetic ability, self-esteem, or self-fulfillment is a luxury. Under this condition, meeting basic needs of its people is not only crucial to the survival of people but also the survival of society, the first functional area of public policy hereby should be given the highest priority.

As for better developed countries, government should pay attention to all of three functional areas of public policy and give each of them appropriate weight when operating in different areas or for different groups of people. Even in these countries there are groups of people still struggling to meet basic survival needs, but the living conditions of some other places or people have already reached the standard of moderately developed countries, and they would care more about seeking and satisfying advanced needs. Given this, government should take care of three functional areas simultaneously to strengthen the multi-level resilience and happiness of society.

### **3 The significance of conducting research on public policy and resilience in China**

Since China adopted an opening up policy in 1978, China has gone through a great period of economic transition. Economic planning has been gradually reduced, giving way to new policies and institutions designed to promote the market economy and the nation's economic progress, such as the opening-up of *special economic zones in coastal area*, the establishment of stock markets, the spinning off of SOEs (State Owned Enterprises), the inflow of foreign direct investment, the rise of entrepreneurship and free competition etc. All this is leading to a more competitive and more efficient economy. China's economy has "taken off" and is now growing at an astonishing pace. In the past 15 years, China's GDP has been growing at an average speed of almost 9% per year and China's GNP per capital also rose greatly, from 300 USD in 1978 to 1090 USD in 2004 (NBSC 2004). Evidently, Chinese people's well-being has risen remarkably during this transition period of China. For instance, public infrastructure has been improved, the service sector has grown, the social safety nets/insurance mechanisms have been strengthened, quality education (i.e., education for all-around development or competence-oriented education) has been popularized over the whole China, etc.

Nevertheless, China is facing bottlenecks threatening sustainable social and economic development. During decades of economic development, there were indeed many deep-seated problems hiding behind the big prosperous scene, such as the deterioration of environment, policy-oriented speculation in stock markets, corruption and loss of state-owned capital, lack of moral codes in business and social life, increase of poor-rich gap, holding off country labor's default salary, unemployment, etc. (Wu 1997). Some of these serious problems were inevitable byproducts of high-speed economic development. Although equality has to be somewhat sacrificed to gain efficiency, many of these problems resulted from shortsighted and inappropriate relevant public policies, destabilizing and impairing the well-being of the whole society. Therefore, aiming at attaining the goal of harmonious society of China proposed by the president Hu of China in the 16th National Congress of the Communist Party of China in 2004, apart from factors favorable to the well-being of Chinese people, policy makers should attach more importance to these kinds of social disharmonious and unstable factors and take the responsibility to promote resilience and protect the happiness/well-being of citizens during this risky and unstable transition period of China.

However, despite much effort, little is yet currently known about the effectiveness of policy in maintaining and protecting happiness, particularly in strengthening multi-level resilience of society. Accordingly, in order to reinforce the exploration of functions of public policies on multi-level resilience of society, it is necessary to carry out research on the underlying psychological mechanism, on the effects public policies may exert when citizens face risky adverse situations, and the impact imposed by public policies on the well-being of citizens. In terms of this, we have conducted a study during the SARS crisis to throw light on the multi-level mechanisms of social resilience. The results of research can be regarded as a theoretical basis to improve the efficiency of policy making, and the way/methodology may also be useful for future studies on public policy and social resilience in other areas.

We investigated the psychological mechanisms from the perspective of risk perception, which plays a role in how human beings respond to risky and adverse situations. We also examined the effects of policies adopted by government during crisis on the risk perception of citizens and their following mental health and coping behaviors. Our research confirmed the positive functions of public policy in strengthening the resilience of citizens and the key role of risk perception played in mechanisms of resilience of citizens which needs to be attached more importance by Chinese government when making policies in a crisis.

This paper will provide a strong rationale for the contributions of resilience promotion efforts in the facilitation of well-being.

#### **4 Multi-level resilience**

Resilience as a concept deriving from developmental psychology has been studied extensively for more than 20 years. In the past few years, along with positive psychology being put forward and blooming quickly, resilience research was brought into a new era (Seligman & Csikszentmihalyi 2000) in which it is no longer a concept unique to developmental psychology but has been infused new vitality in the areas of psychopathology, health promotion, stress management, crisis management, etc.

How resilience is defined can be viewed from two major perspectives: the personal character perspective and the interactive perspective. The former mainly uses person-focused approaches, which compares people who have different profiles of characters within or across time on sets of criteria to ascertain what differentiates resilient persons from other groups of persons. The latter mainly adopts variable-focused approaches, which use multivariate statistics to test for linkages among measures of the degree of risk or adversity, potential qualities of the individual and environmental factors that may function to compensate for or protect the individual from the negative consequences of risks or adversities (Masten 2001).

##### *4.1 From the characters perspective*

From this perspective, resilience is viewed as the inner strengths of a human being (Saleebey 2002). It is a combination of abilities and characteristics that interact dynamically to allow an individual to bounce back, cope successfully, grow stronger and function above the norm in spite of significant stress or adversity (Rutter 1993; Tusaie & Dyer 2004). Such kinds of definitions could be also put into words like “the capacity to rebound from adversity strengthened and more resourceful” (Walsh 1998), “efforts to restore or maintain internal or external equilibrium under significant threat” (Masten, Best & Garmezy 1991), or “representing good developmental outcomes and sustained competence despite the presence of stress and risk” (Werner 1995), etc.

Bonanno (2004) considered resilience as a psychological counterpart of physical immunity system, an innate psychological immune capacity that produces well-being and wisdom even during extremely aversive events and facilitates psychological healing from the inside out. Likewise, there also are some researchers proposing that resilience appears to be a common phenomenon that results in most cases from

the normative functions of basic human adaptive systems (Masten 2001; Roisman 2005). If those systems are protected and in good working order, development will be robust even in the face of severe adversity; if these major systems are impaired, antecedent or consequent to adversity, then the risk for developmental problems will be much greater, particularly if the environmental hazards are prolonged.

Connor & Davidson (2003), the authors of a most widely used instrument for measuring resilience, advocated that resilience embodies the personal qualities that enable one to thrive in the face of adversity. Research over the last 20 years has demonstrated that resilience is a multidimensional characteristic that varies with context, time, age, gender, and cultural origin, as well as within an individual subjected to different life circumstances (Garmezy 1985; Garmezy & Rutter 1985; Rutter 1985; Seligman & Csikszentmihalyi 2000; Werner & Smith 1992; Richardson *et al.* 1990; Richardson 2002). Beginning at a point of biopsychospiritual balance, one adapts body, mind, and spirit to current life circumstances, and then arrives at another level of balance, which may be better or worse than original one.

#### *4.2 From the interactive perspective*

Greene (2002) pointed out that there is no consensus about the definition of the resilience construct. Current evidence suggests that the idea of overall resilience is of questionable utility (Luthar, Doernberger & Zigler 1993; Hunter 2001). Definitions that focus on aggregating various domains are likely to be weakly correlated with outcomes. Because of a weak correlation among the domains of resilience, individuals may vary in resilience characteristics. Moreover, resilience does not function uniformly and automatically, but waxes and wanes in response to contextual variables. So domain specificity is more useful in research and practice application than is a global definition of resilience (Werner & Johnson 1999).

Waller (2001) traced the evolution of the resilience construct across diverse social science disciplines, suggesting that “resilience is a multi-determined and ever-changing product of interacting forces within a given ecosystemic context.” It was also advocated by Tusaie & Dyer (2004) who stressed using a holistic, dynamic, and interactive perspective to understand resilience. From the perspective of positive psychology, the above processes should be characterized by good outcomes in spite of serious threat to adaptation or development (Masten 2001). So understanding these processes is important to the comprehension of the mechanisms of resilience.

First, we need to keep a notion of homeostasis in mind, which refers to a balance between needs and supplies. Both of them could be defined with reference to intrapersonal and environmental factors. Needs could be generated from a person *per se* or external demanding, while supplies could also be viewed as capability, assets or resources for satisfying needs or counteracting the cost of external demanding. In this sense, adversities could be understood as a threat to the satisfaction of human needs and the acquisition of competencies and resources to carry out valued goals or external demanding (Sandler 2001), and supplies could be considered as protective factors (Masten 2001). When the balance or homeostasis between these two major forces is disrupted, the response to that disruption is a reintegrative process, leading to one of four outcomes (Richardson *et al.* 1990; Rutter 1993; Masten 2001; Tusaie & Dyer 2004): (1) the disruption represents an opportunity for growth and increased resilience, whereby adaptation to the disruption leads to a new, higher level of homeostasis; (2) return to baseline homeostasis, in an effort to just get past or beyond the disruption; (3) recovery with loss, establishing a lower level of homeostasis; or 4) a dysfunctional state in which maladaptive strategies (e.g., self-destructive behaviors) are used to cope with stressors and ending with collapse.

Second, we need to figure out common mechanisms to explain the effects of adversities and of protective factors that promote resilience and good outcomes. Protective factors, as suggested by researchers, are multi-level (Tusaie & Dyer 2004), namely the individual, microsystems and macro levels, which reduce the negative effects of adversities through their effects on satisfaction of human needs, on the occurrence of adversities, on exploiting human's potentials and in turn enhancing their capacities on resistance (Maluccio *et al.* 2002). These effects hereby can be described as protective, preventive and promotive (Sandler 2001). This multi-level conceptualization of protection is consistent with a view of resilience as a multi-level concept, which explicitly rejects the notion that resilience resides solely or even primarily within the characteristics of the individual (Hobfoll 2002; Wyman *et al.* 2000).

On the individual level (i.e., intrapersonal), some cognitive factors and specific competencies were identified as contribution to higher levels of resilience. Cognitive factors include optimism, intelligence, creativity, humor, and a belief system that provides existential meaning (Richman & Bowen 1997), a cohesive life narrative, and an appreciation of the uniqueness of oneself. Competencies that contribute to

resilience include a wide range of coping strategies, social skills, educational abilities, and memory above the average level.

On the family level, McCubbin & McCubbin (1988) identified some characteristics that help families be resistant to disruption in the face of change or crisis, such as commitment, support and intimate relationship between family members, social support from neighbors and community, etc.

Mechanisms of resilience that operate at the level of the community are also being identified that may be powerful sources of protection against the effects of adversities. Sampson *et al.* (1997) conceptualizes community social organization as the “ability of a community structure to realize the common values of its residents”. He identified several community characteristics that have important implications for protection from adversity, including rules, resources, and routines.

For the national level, the notion of resilience has been just recognized only relatively recently and has seemingly worked its way into US’s lexicon since the events of September 11, 2001, into the management of public health crisis during SARS in 2003, and also into the crisis management of the tsunami in Southeast Asia in 2004, and so on. How to promote national resilience is still on a burgeoning stage; however, it is pressing and also in high need to enrich the knowledge and experience in this area so as to maintain the harmony and stability during social transition and promote sustained development of the human society, contributing to happiness.

Public policy, as an important instrument of government to coordinate the social function, should have the accountabilities to enhance social capitals and capabilities contributing resilience and happiness during social transition and development.

*Case Study to illustrate the importance of public policies to multi-level resilience promotion*

### **Public policy – Functioning as protector and resilient factor of public well-being during SARS**

Between November 2002 and July 2003, the infectious disease of Severe Acute Respiratory Syndrome (SARS) has swept Guangdong, Hong Kong, Beijing and North China. Due to its nature of strong infectivity and high fatality, and since no definite preventive and treating solutions had yet been found, the crisis confronted Chinese society with a

tremendous challenge. On the one hand, in protecting against SARS and saving SARS patients, the Chinese government instituted a variety of valid measures to control the spreading sources and prevent people from being infected, which brought the infectious disease under control in relatively short period and gained universal positive recognition. On the other hand, in order to contain the panic and potential chaos among citizens during SARS, the Chinese government adopted a series of policies to maintain social stability which to some extent demonstrated its validity in the following reactions of more rational behaviors and mental health of citizens. But it should have been more improvement on the well-being of citizens if there had been stronger theoretical basis for government' policy making.

Therefore, aiming at enriching the theoretical basis for the crisis management of government and also for the national resilience of public, we conducted a study during the SARS episode on the psychological mechanisms of citizens in the face of public health crisis. We constructed a risk perception-centered social-psychological-behavioral predictive model. The results provided psychological and managerial suggestion in protecting against SARS, and also laid the theoretical foundation for the nation to establish a psychological precautionary system, to improve the efficiency of policy making of government during crisis and in turn contribute to the public's resilience and happiness.

In the face of a crisis, people tend to become panicky if they lack enough objective information, or if they know of no definitive solutions. Irrational mental states and behaviors may result. This translates to an impairment of the psychological well-being of the public and often also the stability and harmony of society. So in that kind of uncertain and dangerous situations, effective communication about risk factors becomes critically important. Risk communication is a social process. Its aim is to keep people informed of a crisis. With better information, people will begin to generate appropriate coping behaviors and be involved in more national risk decisions. Risk communication usually happens when human risk perception arises, and functions through reducing people's risk perception. Trauma suggested that risk communication is a systematic process; its key points are promulgating integrated, transparent, authentic, and timely crisis-relevant information, risk assessment of the public and safety educational management to disaster. At the end of April 2003, the National Ministry of Health, People's Republic of China, began to update the news of the national-wide infectious situation every day such as the numbers of new patients and

suspect patients in each province, assuring people of being informed of what happened with the SARS in time. This action is a good example of risk communication conducted by the Chinese government over recent years. Referring to the campaign of Chinese government successfully protecting against and controlling the impairments of SARS, we conducted a research, aiming at exploring the underlying mechanisms of the crisis management concerning the public. Our results provided theoretical basis and improved the efficiency for the countermeasures of government to manage the irrational psychological and behavioral reactions of the public and potential panic and chaos.

Due to the key role of risk communication between government and the public in the crisis management with regard to the public, research was carried out with a view to answer two questions: How did the public psychologically and behaviorally react to this never-met infectious disease and to governmental risk communication? What kind of role, from the view of psychology, did governmental risk communication play in the management of the risk perception and coping behaviors of the public and helping the public recover to the normal state? The addressing of these two questions is implacably important for the establishment of a public-resilience system with social-psychological and behavioral indicative indices, contributing to the whole profile of crisis management of government. These two aspects were the focuses of interest in this study.

### *Research hypotheses*

#### (i) Research questions and purposes

This study was conducted in the background of SARS threat on diversified groups of people from a variety of areas in China with different levels of SARS infection severity. In order to understand the multi-level mechanisms of the public's resilience under the SARS crisis, there were three questions needing to be investigated at first: how did the informational factors influence risk perception, what were the features of individuals' risk perceptions, and what were their effects on proposed precautionary indices such as the public's coping behaviors, mental health, and so forth?

#### (ii) Hypothesized framework of predictive model

Based on classical psychological theories of information processing and the S-O-R (stimulus-organism-response) model, we proposed a predictive model from the following three aspects (see Figure 8.1).

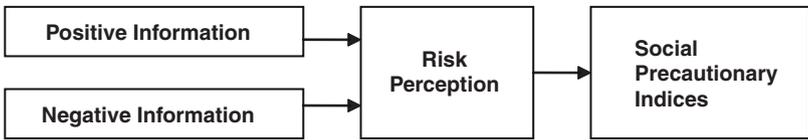


Figure 8.1 Chinese people's psychological behavior during SARS crisis

(1) Positive information and negative information. As the independent variables in the predictive model, according to its nature in threatening or protecting individual safety, the information could be divided into positive information and negative information. Referring to the information issued by the National Ministry of Health and mass media, we categorized them into negative information and positive information. Information on SARS infection is negative information (suggesting negative consequences), e.g. the number of new SARS cases. Information on recovery and on measures taken by government to prevent against the spread of SARS is positive information (suggesting positive consequences), e.g. new recovery cases and the policies or measures taken by government.

(2) Risk perception. Risk perception, as mediator variable, emphasizes an individual's experience through intuitive judgment and subjective feeling which is affected by many psychological, social, situational and cultural elements (Slovic 1987; Vlerk & Stallen 1981; Douglas & Wildavsky 1982). Slovic (1987) proposed a psychometric model of risk perception of which two orthogonal dimensions of familiarity and controllability were identified. Specifically, in a Cartesian coordinate system comprising these two factors, every risky event is located at a point which could directly exhibit human perceptual features of the risks on that event. The present study adopted this two-dimension psychometric model to measure risk perception of the public on various risks during SARS.

(3) Psychological and behavioral indices of resilience. In the current study, we considered 6 indices to represent the resilience and general well-being of citizens during the crisis of SARS, including risk assessment, feeling of nervousness, coping behavior, mental health, SARS situation anticipation and economic development anticipation.

(iii) Hypotheses.

**Hypothesis 1:** In the crisis of SARS, SARS-related negative information aggravated individual risk perception, and to public irrational nervousness

or scare; but positive information, especially that about policies and measures taken by government had significant contribution to alleviating public irrational cognition.

Hypothesis 2: The unknown and uncontrollable elements of SARS *per se*, were the key factors inducing public feeling of insecurity and alarm.

Hypothesis 3: SARS-related information influenced the public's psychological and behavioral indices through their risk perception. Six variables of risk assessment, feeling of nervousness, coping behavior, mental health, SARS situation anticipation and economic development anticipation would be effective precautionary indices in predicting public resilience in crisis.

### *Research method*

#### (i) Subjects

The removal of questionnaires with missing or extreme values resulted in 4231 valid subjects. Demographic characteristics of respondents are listed as in Table 8.1.

**Table 8.1** Sample distribution and demographic characteristics

<i>Cities</i>	<i>Sample N</i>	<i>Demographic characteristics</i>	<i>%</i>
Beijing	363	<b>Gender</b>	
Tianjin	434	Male	42.1
Inner Mongolia	190	Female	57.9
Guangzhou	208		
Shanghai	286	<b>Age range</b>	
Changsha	208	Below 20	8.5
Hangzhou	130	20–29	48.6
Jinhua	225	30–39	19.8
Guiyang	205	40–49	15.4
Shijiazhuang	146	50–59	6.4
Shenyang	223	Above 60	8.5
Ningbo	250		
Wuhan	236	<b>Educational level</b>	
Wuxi	238	Primary secondary school and below	8.1
Jiangxi	239	High secondary and technical schools	19.6
Chongqing	184	College degree	19.8
Shanxi	271	Bachelor degree	41.9
Xi'an	195	Master degree and above	10.5
Total N	4132		

(ii) Instruments

Before May 9th, through survey or web sites, we conducted a pilot study on this preliminary questionnaire, surveying 236 respondents randomly recruited from Beijing. Based on the analysis of results of pilot study, we deleted or modified items which were hard to understand or of low reliability, and formed the final version of questionnaire in this study. The questionnaire consists of three parts, as follows:

(1) SARS-related Information. It represented two groups of items: information concerning SARS *per se*, including its characteristics, infectivity, mortality, etc., and information about preventive measures and policies, including official speech, protecting and insulations against SARS, public bus, supermarket supply, etc. There were 23 items in all, and all are measured against a 5-point Likert scale.

(2) Risk Perception Scale. It was derived from the psychometric model of risk perception proposed by Slovic in 1987; we combined it with 6 events of SARS: SARS pathogen, spreading and infectivity, recovery rate, preventive measures and policies and policies, infectivity after recovery, and after-effects on physical health. The questionnaire asked the respondents how familiar and controllable they feel about the 6 events, and their overall feeling respectively on these two dimensions. All responses are again coded on a 5-point Likert scale.

(3) Social-psychological Precautionary Indices. They are consisting of 6 resilience indices: risk perception, feeling of nervousness, SARS situation anticipation, mental health, coping behavior and economic development anticipation. We adopted the GHQ 12 (General Health Questionnaire) as the measurement of mental health, and it had been used by a study on the laid-offs in China (Shi, Song & Zhang 2001).

(iii) Procedure

Electronic version of questionnaires were emailed to the qualified surveyors of 17 cities in China who then printed them out locally. The investigation was conducted in the period from May 9 to May 19 in 2003; both the questionnaire distribution and feedback were completed during this time. Since the first official report on April 21st, the SARS situation had been gradually under control, though SARS remained a threat. We determined the degree of infection severity for each district according to the new SARS cases and suspect cases reported.

*Results & discussion*

## (i) Analysis on informational factors influencing risk perception.

We performed factor analysis via Varimax rotation by SPSS 11.5 on the 23 items measuring the importance of each kind of information in people's judging of risk. We obtained four factors, with a cumulative squared loading of 62.27% after deleting three items which loaded too low. We performed the factor analysis again, resulting in a clearer 4-factor structure, with the cumulative squared loading rising to 65.69%. Later analysis accepted the 4-factor model, with 20 items in all.

Factor 1 is "SARS infectivity information," including new SARS cases, cumulative SARS case, new and cumulative suspect cases, new and cumulative death cases, and the number of isolated persons. They are all in the nature of negative SARS-related information.

Factor 2 was "Recovery information," including new recovery cases and cumulative cases discharged from hospital, in the nature of positive SARS-related information.

Factor 3 was "information of personal interest," such as whether there are cases in their organizations or living areas, whether there are cases in people they know, and whether there are cases in their age group. They are all in the nature of negative SARS-related information.

Factor 4 was "information on measures taken by government", including government official speech, news press, the blocking ways against SARS spreading, the improvement of hospital treatment and conditions, and bus\water\electricity supply. These are in the nature of positive SARS-related information.

We took further analysis on the effects of all information in each city, and it was found that in all districts, people paid more attention to the recovery information and the information of personal interest; in the severest infectious district, people paid significantly higher attention to the information about infected cases than in other districts.

## (ii) The spatial characteristics of the public's risk perception of SARS in May, 2003

According to the six types of risky events in SARS and people's overall feeling, we did ANOVA respectively on the feelings of familiarity and controllability; the results indicated that people's feelings of familiarity and controllability towards six risky events were significantly different. The descending order of people's feelings of *familiarity* toward six events was: spreading and infectivity, preventive measures and policies, recovery rate, SARS pathogen, infectivity after recovery

and aftereffects on physical health; while the descending order of people's feelings of *controllability* over 6 events was: preventive measures and policies, infectivity after recovery, aftereffects on physical health, spreading and infectivity, recovery rate, and SARS pathogen. In terms of these results, we drew a map of public risk perception distribution (see Figure 8.2).

As shown in Figure 8.2, firstly, people's risk perception of SARS is generally located in the upper right part of the risk perception quadrant, the area of "familiar and controllable," which indicates that, in the middle of May, the general risk perception of Chinese people to SARS was, by and large, under control. Secondly, among the six risky events, SARS pathogen is in the area of "uncontrollable and unfamiliar," that is to say, people felt the most doubtful and uncertain about SARS pathogen; people's perception of SARS-related events complied with the scientific research proceedings in SARS virus at the time (Li, Li, Zhang, Lu & Zhang 2003). Thirdly, after effects on physical health and infectivity after recovery are located in the area of "unfamiliar but controllable," namely that people felt unfamiliar to these two factors, but still had a sense of control. Last, other three events (infectivity, preventive effects, and recovery rate) are located in the area of "controllable and familiar," suggesting that people felt informed to these three concerns as well as controllable and correspondently were in lower risk perception. It could

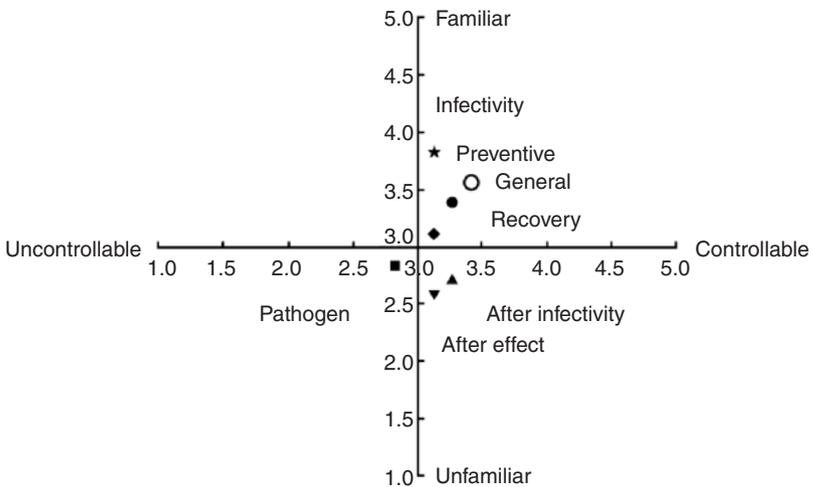


Figure 8.2 Public risk perception distributions

be linked with the fact that in the former half of May, the measures and policies taken by government came into effect and SARS situation was primarily put under control. In order to test its generalizability across districts with diverse degree of infection, we did the same descriptive analysis and drew distribution maps of risk perception for five cities: Beijing, Huhehaote, Wuhan, Guiyang and Guangzhou. Although the results presented subtle changes of factor positions, their locations in each quadrant remained generally the same. The results above suggested that this risk perception map reflected the common risk perception features of Chinese people in SARS crisis, and which indicated that people's feeling of uncontrollable and unfamiliar could be potential factors to arouse public panic. Hypothesis 2, that the unknown and uncontrollable elements of SARS *per se* were the key factors inducing unsafe feeling, was supported here.

(iii) Construction of empirical model of mechanisms of risk communication and its effects on public resilience

Structural Equation Modeling is currently the most widely-adopted method to explore causal relationships in a complex theoretical model (Hoyle 1995). We used the statistical software of Amos 4.0 to test the hypothesized risk perception-centered model. Based on the results from factor analysis, we categorized SARS-related information into four factors as independent/exogenous variables of this model; they were infectivity information, recovery information, information related to personal interest and information about measures and policies taken by government. Second, we took the risk perception consisting of familiarity and controllability as the mediated variable (endogenous variables in SEM). In the end, the dependent variables (endogenous variables in SEM) were two factors extracted from the six precautionary indices through exploratory factor analysis of which the cumulative square loading was 53.45%; factor one was negative precautionary indices, including risk assessment, feeling of nervousness and SARS situation anticipation; factor two was positive precautionary indices, including mental health, coping behaviors and economic development anticipation.

Table 8.2 presents the goodness of fit statistics. To present a good model the first four indices, namely the Unbiased Goodness of Fit Index (GFI), the unbiased Adjusted Goodness of Fit Index (AGFI), the Comparative Fit Index (CFI), and Tucker-Lewis Index (TLI), should all be no less than 0.9, and the Root Mean Square Error of Approximation (RSMEA) should be less than 0.08. The hypothesized

**Table 8.2** Models' goodness of fit indices

	$\chi^2$	<i>df</i>	<i>GFI</i>	<i>AGFI</i>	<i>CFI</i>	<i>TLI</i>	<i>RSMEA</i>
Model 1	2045.023	94	.940	.914	.895	.867	.070
Model 2	1633.910	67	.946	.915	.911	.879	.074
Model 3	1204.005	66	.960	.936	.935	.911	.064

model 1 did not fit data satisfactorily, so we made adjustments in accordance with the modification indices suggested for modeling. Model 2 was formulated after dropping the index of economic development anticipation from the positive social-psychological precautionary indices and the index of SARS development anticipation from the negative social-psychological precautionary indices. Also based on suggested modifications, we added a path in Model 3 from SARS infectious information directly to negative precautionary indices. Model 3 fitted the sample data best. So we accepted it as the best theoretical model.

The structural equations for Model 3 are estimated as follows:

$$\text{Risk perception} = -.16 \text{ infectivity information} + .12 \text{ recovery information} - .23 \text{ information of personal interest} + .18 \text{ government policies \& measures} + \zeta + \alpha$$

[1]  $R^2 = .07$

$$\text{Negative precautionary indices} = -.23 \text{ risk perception} + .38 \text{ infectivity information} + \zeta + \alpha$$

[2]  $R^2 = .21$

$$\text{Positive precautionary indices} = .41 \text{ risk perception} + \zeta + \alpha$$

[3]  $R^2 = .17$

As shown in the above three equations, the impact of informational factors on risk perception varied. Infectivity information and information of personal interest had a negative impact on risk perception; while recovery information and information about policies and measures taken by government had positive effects.

Worth noting is the fact that information about SARS infectivity affected negative precautionary variables directly. Thus, with information about increasing infectivity, people's risk assessment in

terms of negative precautionary variables tended to be higher. This must be the reason that people usually judge risky events from extrinsic and objective indices such as its occurring rate and seriousness of consequences (Xu 1998). So when an event happens frequently and with serious consequences, people will perceive higher risks for this event.

We advocate reasonable consciousness about risk factors as a response to an impending crisis, but excessive worry and irrational risk perception will induce unnecessary worry, scare, tension of being at loose ends, emotional disorders, and even arouse collective panic in a large social range. This study found that, in the severest districts, information of being infected and that of personal interest could induce irrational and excessive risk assessment, while the positive information, including recovery information and that with policies and measures taken by government, could level down individual risk perception, help them objectively assess the SARS threat on humans, and establish rational risk assessment.

In the campaign of protecting against SARS, the authors released five issues of the social-psychological precautionary newsletter (IoP 2003a, 2003b), in which it was suggested that government timely strengthen the publicity and transparency of recovery rate and new recovery cases, and pointed out the bias in risk perception. They to some extent helped the public objectively assess the SARS threat and establish rational risk consciousness. The active preventive measures and policies taken by Chinese government functioned in remising the public panic, such as blocking up the spreading sources, controlling the population flowing, setting special hospitals to save patients, etc; these measures could increase people's feeling of safety, and decrease their perception of risk. These results showed that: negative information, including SARS-infected patient information and SARS information of personal interest, aroused and elevated public risk perception; while positive information, including recovery information and information about measures taken by government, decreased their risk perception. Hypothesis 1 was supported.

The results were also included in the five issues of social-psychological precautionary newsletter to government. The precautionary variables proposed in this study became the referring indices for Beijing city government to analyze and predict the resilience and well-being of citizens during SARS among 18 districts of Beijing, and also were viewed as one of theoretical foundations for comparing and decision making in the five northern cities of China.

## **5 Conclusion**

From the exploration of the mechanisms of risk communication between government and the public and its effects on the public's following psychological and behavioral reactions during the SARS, we learned that risk perception, anticipation, mental health and coping behaviors were four crucial indicators for the resilience and well-being of the public confronted with adversity. Accordingly, to control the irrational psychological and behavioral reactions of the public, government should pay more attention to the appropriate ways of releasing crisis relevant information, especially the negative and self-related information, the information transparency, and attach importance to the reports of mass media on the measures and polices taken by government to manage the crisis as well, which could alleviate the irrational risk perception and panic.

The SARS episode has thrown light on how we may establish a system for crisis management from a multi-level view to enhance resilience, harmonizing relationships at the individual level, family level, community level, social level and natural level. It also underscored the need to establish a precautionary indices system to monitor the functions of such a multi-level resilience system.

## **6 Future research directions**

As we said above, during the social and economic transitional period, constructing socialistic harmonious society is one of the most important goals for Chinese society. It will drive the government and the public to attach more importance to the problems with regard to harmonious development, such as body and mind health, labor relationship, economic development, environment protection, etc. Moreover, happiness/well-being, as the ultimate end the human being strives for, should be kept in mind and referred to as one of the most important indicators in the construction of harmonious society by Chinese government.

Health under the WHO definition is a state of fulfillment encompassing physical, mental and social well-being and not just the absence of disease or infirmity. We have applied this concept to organizational research, and have come up with the term "healthy organization" to highlight the harmonious development on both the organizational productivity and the well-being of people in organization. This term is becoming more and more popular in the academic and practical area of management and Industrial/Organizational psychology. Essentially,

healthy organization shares the same goal with building harmonious society, namely enhancing the happiness/well-being of its people and at the same time promoting the development of organization/society. Moreover, society to some extent can be viewed as consisting of various organizations, with different nature and different level, such as individual, organizational, community and social level. Thus, we advocate for building *healthy organizations* in order to achieve the goal of harmonious society of China.

From the perspective of individual and organization level, building healthy organization means creating a favorable working environment, establishing harmonious labor relationships, improving psychological health of employee, cultivating organizational culture, promoting living quality and future development of employee, and strengthening the resilience of employees and organizations to handle the stress of competition and transformation. From the perspective of the community and society level, building a healthy organization aims to stabilize the society, prevent crisis, increase the resilience of citizens, advance the abilities of government leader and enhance the core-competence of China.

We now propose six areas for future research, hoping to illuminate how the multi-level resilience system and healthy organizations can be established down the road.

(i) Establish standards of health

Establishing health standards of health incorporating psychological and behavioral indices at the individual, leader, organization, community and society levels is a prerequisite to establishing a harmonious society. Health is a multi-facet concept. For the individual, health means being adapted to the transformations of natural environment, society and economy. For the leader, health means promoting management ability and making sound decisions. For the society, health means reasonable arrangements for human resources. Establishing standards could provide theoretical and measurable baseline of building harmonious society. Furthermore, this system could also offer judging tools which have different levels for government to draw the relevant policy implications.

(ii) Set up multi-level resilience and psychological precautionary system for social crisis

As mentioned above, for decision makers of public policy, a key problem of building harmonious society is how to forecast, cope and solve the “unharmonious factors” aroused by the economical and social

transformation. As we all know, disharmonious psychological state of the public is a precursor to social crisis. Thus, it is important to add multi-level resilience and psychological precautionary system of social crisis to national security system. For example, during the SARS period, we had already set up a preliminary psychological precautionary system and accumulated many experiences about how to calm down the public's unhealthy psychological state (see above study). The establishment of this system could offer the psychological reactive model of the public when they face a social crisis or disaster, provide the theoretical basis for countermeasures to improve the ability of resilience and crisis management of the Chinese government, and scientifically validate the efficiency of public policy taken by the Chinese government as well.

(iii) Explore the psychological and behavioral mechanisms of labor conflicts

With the globalization trend in economic development, labor guarantee system needs to construct a Labor Relationship Conciliation System with Chinese characteristics. While enterprises pursue maximizing their profit, how to solve problems of labor relationship becomes more and more intractable. The labor conflict (such as psychological problems of decapitator and survivor during organizational transformation, employment problems of people injured in the workplace, welfare of casual laborer who comes from rural areas, etc.) will harm not only the individual organization, but also the whole society. Hence, government should give their attention to legal right of these social vulnerable groups and provide some preferential strategies to them when making public policy.

(iv) Adopting the Employee Assistance Program (EAP)

Along with our society switching to the market economy, there is increasing evidence that mergers and acquisitions, organizational restructuring and downsizing can adversely affect the psychological health of employee. Thus, psychological problems, such as job insecurity, job stress and job burnout, have become more and more common among workers today. In recent years, many companies dealing with Employee Assistance Programs (EAP) started to extend their branches into China. EAP are programs aiming at alleviating personal, family and work-related problems that might interfere with the performance and physical/psychological health of workers. Expanding this kind of service could effectively decrease the level of unhealthy psychological state of the public, reduce the probability of various

troublesome activities to organizations, and increase the resilience of both employees and organizations. Evidently, EAP is an important step to healthy organization, and it must be implemented in terms of cultural and management backgrounds of China.

(v) Strengthening leadership at the top

The competence of leaders, especially that of leaders of administrative departments who are in charge of public policies, plays a key role in constructing a harmonious society. Building a competent leadership is a significant strategy of the 16<sup>th</sup> National Congress of the CPC as well.

(vi) Cultivate healthy culture of organizations

Although promoting economic development and living standard are important in building a harmonious society, maximizing economic profits could not by itself increase happiness. There is much evidence that happiness is one of the direct factors leading to positive behaviors, such as organizational citizenship behavior (OCB) and job satisfaction. Thus there is an imperative to construct a healthy organization culture emphasizing happiness/well-being centered incentives rather than money-centered incentives, establishing an atmosphere of cooperation, a transformational managerial style, and promoting core competence of organization, community and society.

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# 9

## Happiness and Development – Public Policy Initiatives in the Kingdom of Bhutan

Vijay Kumar Shrotryia

*If we do not learn from history, we shall be compelled to relive it. True. But if we do not change the future, we shall be compelled to endure it. And that could be worse.*

Toffler 1972

### Introduction

The primary focus of national planning in a country surrounds the fulfillment of bigger or smaller needs for its citizens. Ideally, the policies undertaken will improve the well-being of the people. The primary focus, if shifted to economic development, can lead to a situation where the well-being of people takes a backseat while capital investment and infrastructural development merely spearhead economic growth with little concern for welfare.

Happiness is to many the ultimate goal of human life. Bracho (2004) considers happiness as the *greatest human wealth*. It is supposed to be an intrinsic target of development. Ironically, however, visible development sometimes compromises with the happiness of the people. The state primarily takes up the responsibility to patronize development by initiating policies in this direction. The policies are formulated, documents are drafted, and subsequently implementation takes place with a target of achieving higher economic growth. Unfortunately, economic growth is sometimes achieved without making the people of the state happy. Happiness should be the single ultimate criterion for evaluating the development process. This however is typically not the case. The parameters of human development come closer to the study of quality of life, life satisfaction or happiness as compared to just economic development.

Bhutan is unusual in that respect as it puts emphasis on happiness rather than on economic development. A famous statement from its leader says – “*Gross National Happiness (GNH) is more important than Gross Domestic Product.*”<sup>1</sup> A sustainable growth rate has helped this small sovereign nation to keep its environment and culture intact. Moreover, once the happiness-driven policies are implemented and followed through, they appear to take care of economic development on their own. Even though one may not observe fast development and surging economic indicators in this small Buddhist nation, it has made giant steps forward in terms of human development indicators and has kept the people happy and contented. In the subsequent paragraphs, first happiness and development has been discussed in brief and then the initiatives of Royal Government of Bhutan (RGOB) have been highlighted and their impact is studied.

## Happiness and development

Veenhoven (1991) terms happiness as *the degree to which an individual judges the overall quality of life favorably*. One’s happiness often depends on the environment. And at times a positive attitude could provide a feeling of happiness even while in utmost poverty. *Haves* and *Have-nots* are determined by the forces of economies like market, environment, consumption, and competition and alike, and comparison often makes people unhappy, as one perceives one’s relative position being overtaken by others. “*At a point in time, those with more income are, on average, happier than those with less. Over the life cycle, however, the average happiness of a cohort remains constant despite substantial income growth.*”<sup>2</sup> (Easterlin 2001; also see Layard 2003).

Thinley (1999) is of the opinion that beyond a level, an increase in material consumption is not accompanied by a concomitant rise in happiness.<sup>3</sup> Happiness is not identical to utility, but it well reflects people’s satisfaction with life.<sup>4</sup> Generally, happiness is taken as a momentary emotional reaction to an event which makes one happy. It is also considered as a momentary response and need not necessarily be a stable and sustainable feeling. The stable characteristic of well-being, though sensitive to external events, does not become a controlling factor rather it operates on the principle of inclusion and accommodation. The policy framework acts as a guideline to create an environment where the individuals develop confidence and further their efforts to achieve their targeted goals both objectively as well as subjectively.

The Big-Push theory as propounded by Rosenstein Rodan (1943) and the Balanced Growth Theory by Hirschman (1958) provide models to be followed for improving economic growth and subsequently developing a nation. But to poor countries, the main concerns are always identified as health and hygiene, education, social security, poverty alleviation, gender related issues, people participation and empowerment etc. *“The Millennium Development Goals are the world’s time-bound and quantified targets for addressing extreme poverty in its many dimensions – income poverty, hunger, disease, lack of adequate shelter, and exclusion – while promoting gender equality, education, and environmental sustainability. They are also basic human rights – the rights of each person on the planet to health, education, shelter, and security as pledged in the Universal Declaration of Human Rights and the UN Millennium Declaration.”*<sup>5</sup> In one or the other ways all these issues are happiness driven. Ironically these areas have been substituted by infrastructure development, industrialization, advancement of technology and innovation etc. among the nations which fall in the so called “developed” bracket or the First world nations (see Easterlin 1981). Does one derive a conclusion that the first world has shifted the focus from basic areas of public-good or happiness towards improving disclosure practices and concentrating on economic indicators?<sup>6</sup>

There are evidences from the developing and developed nations on their transformations in their happiness level.<sup>7</sup> The partnership of developed and developing world can create an environment which would provide mutual happiness. This needs to be addressed more convincingly through the policy initiatives at the government level.

There could be convincing arguments to justify that there are more problems in the areas of education, health and hygiene, social security, poverty etc. in the developing nations as compared to their counterparts in the developed world and therefore accordingly priorities are established. But still somewhere down the line I feel in the rat race of becoming a developed nation, the third world is making a lot of compromises and sacrifices which would be realized later. Hunt (1980) looks quite concerned about the irony of welfare in the developing (growing) economies when he says, *“What maximizes welfare in a growing economy is not clear. Is it maximizing the rate of growth, maximizing profit, maximizing consumption, maximizing consumption per head?”*<sup>8</sup> Most economists believe in the theory of “the more you consume the happier you are.” The consumption here is of material commodities and it is related to the commodity/work space so the kind of work one does and the number of hours one puts for it also corroborates to the

consumption quality. So the consumption of material commodities as well as of time is important for making a person happy. But so far as its practicability for the general human being is concerned, it may not be possible as Albert and Hahnel<sup>9</sup> puts it *"this is most unlikely for human beings."* Further inflation has a relation with welfare *vis-à-vis* happiness (see Frey & Stutzer 2002a, 2002b, 2002c) and it is observed that *"since people's happiness is directly related to the quantity of the consumption good, welfare is unambiguously lowered when the inflation rate goes up."*<sup>10</sup>

Happiness needs to be considered as an objective for development planning where endogenous and exogenous resources needs to be tapped to assure and improve satisfaction level of people. In the next few paragraphs such evidence is traced from the Royal Kingdom of Bhutan.

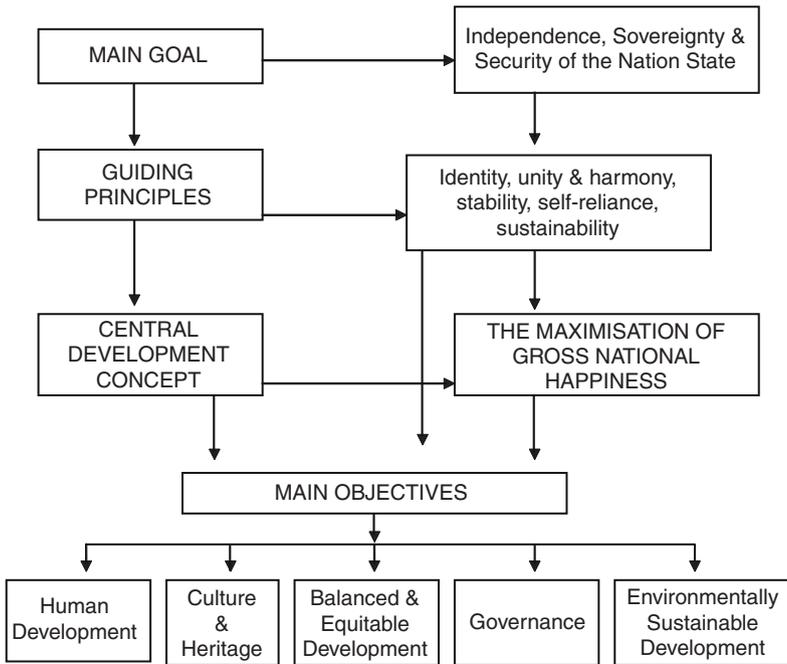
### **Public policy initiatives in Bhutan**

Bhutan<sup>11</sup> is a unique sovereign Buddhist nation which followed a conscious policy of isolation. The third king of Bhutan, His Majesty Jigme Dorji Wangchuk had stated in 1952 that the goal of development should be to make the people prosperous and happy.<sup>12</sup> This basic thought has directed the priorities of RGOB to emphasize more on the social and cultural development apart from the economic development unlike most of the other nations. Bhutan has also been concerned about the Gross Domestic Product (GDP) growth which is evident from its Five Year Plans but it is driven by the fact that priorities be established keeping in mind its impact on the Quality of Life *vis-à-vis* GNH.

The concept of GNH has evolved from the basic constituent features of Bhutanese society in the beginning of the twentieth century when the social fabric was being woven. Buddhism, which surrounds feudal set of values, forms the basic constituent features of Bhutanese society. Mathou (2000) captures modernization and preservation of national heritage *"under the catchphrase of GNH."*<sup>13</sup> The RGOB has been trying to provide better facilities and services to the people to ensure their welfare through its Five Year Plans and other planning instruments. *"The pursuit of growth in GNH rather than in GNP reflects Bhutan's anxiety to avoid some of the more glaring failures of the blind pursuit of economic growth."*<sup>14</sup>

*There is much agreement that GNH is a good idea, for many it offers the glimmerings of refuge against the steadfast tide of scientific reductionism. For others it provides relief from the stale indicators of development that enjoys so much currency.*<sup>15</sup> GNH is, undoubtedly, a unique paradigm of a chas-

Figure 9.1 Normative architecture for the Kingdom’s future change and development



Source: RGOB 1999 (Bhutan 2020 document) p. 15.

tening possibility in which the main motivating force behind human effort is not economic gain, but the cultivation of a humane society, the ultimate goal being the happiness of all people (Powdyel<sup>16</sup>). Veenhoven (2004) defines GNH as “the degree to which citizens in a country enjoy the life they live, GNH is then an aggregate concept, like the concept of GNP that sums goods and services.”<sup>17</sup>

Figure 9.1 shows how Bhutan considers GNH as its central development concept and what is its relationship with other priorities. Interestingly it is seen that the kingdom has two dimensions of goals viz. the guiding principles and independence, sovereignty & security of the nation state.

These two goals are the driving forces for the maximization of GNH but it has to ensure that there is no compromise made so far as its “identity, unity and harmony, stability, self reliance and sustainability” is

concerned which are shown as guiding principles. These guiding principles and central development concept *viz.* GNH, establish five main objectives as – human development, culture and heritage, balanced and equitable development, governance and environmentally sustainable development. These objectives make the process of development unique in this tiny kingdom. This is one of the most important evidence of concentrating on happiness as compared to (economic) development.

The sense of one community is reflected in practice in rural and urban areas alike in Bhutan. Bringing up the children of relatives or of the people of the same village, bearing their expenses etc. is a very common practice here. *“Our ability to survive depends on our sense of ourselves as members of a national community. This implies both the development of the institutions of national cohesion and participation and the consciousness of Bhutan as a nation.”*<sup>18</sup> Bhutan has been participating in the international discourses and deliberations and in the last decade it is observed more with a difference. It is making good investment in building up the institutions of national cohesion.

The *Tshogdu* (National Assembly) was established in 1953 which is the highest legislative body in the kingdom. The *Thrimkhang Gongma* (High Court) was established in 1968 comprising of the Chief Justice and seven *Dungthrim*s (Judges) and *Thrimkhangs* (District Courts) in all 20 *Dzongkhags*. The judicial system has been separated from the executive and legislative branches in Bhutan. The *Lhengye Zhungtshog* (Cabinet) was established in 1968. The king devolved full executive powers to the council of ministers elected by the National Assembly in 1998. The *Lhengye Zhungtshog* is the highest executive body in the country which consists of the council of ministers and the members of the *Lodey Tshogdey* (Royal Advisory Council) which was established in 1965 consisting of six elected representatives of the public, two elected representative of the clergy and one nominated by the government who functions as Chairman of the council. It advises the king on matters of national importance, acts as a bridge between the government and the people and ensures that the laws and decisions of the national assembly are implemented. The members of the *Lhengye Zhungtshog* are collectively responsible to the king and the national assembly. Under the personal initiative of the king with *“the objective of strengthening traditional local institutions and enhancing their role in development policies and activities”*<sup>19</sup> *Dzongkhag Yargye Tshogchung*s (DYT – District Development Committee) and *Gewog Yargye Tshogchung*s (GYT – Block Development Committee) were established in 1981 and 1991 respectively In the dual system prevailing in the kingdom, the

*Dratshang* (Monastic Body) plays an important role in the spiritual and cultural life of people apart from participating in the decision making institutions like the *Tshogdu* and the *Lodey Tshogdey*.

The dynamism which is evident from the establishment of these important institutions in the kingdom, has allowed it to deal with its environment more firmly. The law and order condition is excellent, crime and "corruption" very minimal (Rutland 1999), no capital punishment, beggars hardly seen, life is relatively less hectic and the physical environment well protected. The forest coverage was 72.5% in the year 2004<sup>20</sup> and the kingdom is committed to "*maintain at least 60% of the land area under forest cover for all time to come.*"<sup>21</sup> These are some of the generally observed indicators which have been maintained through these important institutions.

The most important factors for Bhutan's development have been continuous culture, environment and *Vajrayana Buddhism*.<sup>22</sup> The kingdom has concentrated on maintaining its unique culture in all these years which is evident from the fact that as a nation there is a dress code and *driglam namjha* (code of conduct) which is strictly followed by citizens in their public life. It has concentrated on the policy of decentralization and participation in last two decades and both of these elements have been chosen as essential elements of GNH. Since 1981, the King has initiated a vigorous program of administrative and political decentralization. 9th FYP emphasizes on *Geog* (Block <consisting of villages>) based planning which ensures the participation of people from the lowest level of administration. The nation has made great efforts to achieve these objectives through its policy initiatives in all the sectors of development. Bhutan has shown that it is open for change happening around the world even when it comes to look at its culture as its foreign minister expresses this to Schell (2002) "*Some people tend to look at culture as static, but actually culture is always evolving. It is a tool, and when a tool becomes obsolete, you have to change it.*"

The impact of GNH as a national objective is also visible from the cultural policy in Bhutan which is noted for its concern for mutuality, accommodation and compassion. The government is aware of the challenges to get this culture divulged as it is finding it difficult to determine the shape of the institutions in the changing scenario. Still the priorities are well defined and the citizens well informed about the government initiatives. As mentioned earlier, the institutions of importance have been quite dynamic in nature. Individuals heading such institutions are well oriented and briefed about the international developments in all the fields of importance like economics, society, politics, culture, spiritualism etc.

The issues like environment, unemployment, globalization, infrastructure development, media, communication, and information technology are into the official documents and one could see it being given importance practically. Bhutan has taken into account the cultural, social, economic and historical costs of not engaging in infrastructural development in its planning and policies. Another area of concern which has emerged in the last around one and half decade is urbanization. The nation believes in the philosophy of “*one nation – one people*”. Bhutan realizes that in the times ahead it would have to face a greater challenge since a new Bhutanese culture is expected to emerge in the new urban centers. It has been the strategy in this kingdom to deal with poverty by strengthening food security through proper distribution and adequate relief measures as necessary. It is realized on a general note that large amount of investment is required to make the rural life more attractive so that rural-urban migration can be reduced. It could also increase the returns on farming *vis-à-vis* improving the quality of life of people in the rural areas. The RGOB has initiated macro level policies with its development partners to address poverty both in rural and urban areas. Political stability and unity has been addressed through transparency in governance. It does not want development which is not sustainable and this is visible from the academic discourses taking place in most of the ministries, departments, units and institutions. There is hardly an individual in the capacity of a decision maker who neither is nor oriented on the basic premise of sustainable development. International volunteers and NGOs are providing help to the government in the process of increasing GNH through following policies towards sustainable development.

The RGOB has very carefully drafted its plan documents after considering the alternatives and the road map is drawn keeping in mind the path of GNH. The five year plans are reviewed periodically to examine the shortcomings and prospects so that the focus is not lost at any time. The process of review has become more organized and planned during last three five-year plans. During the 8th plan period apart from the above mentioned issues the position of the private sector, the macro economy, as well as the status of governance has also come under scrutiny. It is important to mention here that the private sector was given more importance in the 6th FYP when the strategies were drafted to facilitate its development. The process of corporatization of government agencies and divestment of government equity to the private sector was started during the 6th FYP and since then the RGOB has been quite active in privatizing many of the profit making govern-

ment enterprises and the this trend of privatization is still being actively pursued today. It is aware that “*globalization offers unprecedented opportunities for human advancement*” although “*it also poses new and increasingly complex challenges.*”<sup>23</sup> It realizes its vulnerability to the effects of globalization and this realization has provided an opportunity to concentrate on the GNH-driven development. This policy is not followed in isolation with economic development rather they go together. As a result traditional values and culture are not compromised at the cost of economic development. Efficiency, transparency and accountability are considered to be the main objectives of good governance in Bhutan and to achieve these objectives, larger ministries have been divided into smaller ones on the basis of their functional areas and new departments and units have been created wherever necessary.<sup>24</sup> Another important feature of good governance, which is visible through the documentation and practice, is developing trust among people towards the government and its established institutions.

In the process of development in isolation, Bhutan did not allow television viewing and internet till 1999. But studying the mindset of people and looking at the pros and cons of the impact of television and internet and the preparedness of the government to face this challenge, it opened its doors for the advent of the television and subsequently the internet. This step of the RGOB has changed people’s life here. The government remains, however, more cautious of its bad effects than its good impact on the public.

Kuensel<sup>25</sup> writes in its editorial dated January 1, 2000 that “*Bhutan has understood, perhaps better than most other countries, that there is nothing such as unlimited progress. Development comes with a cost, be it the deadly stain on our natural resources, that impact on the human soul through growth of material desires and spiritual superficiality, or the breakdown of society, the family and, therefore the individual. We learned that progress brings us many gifts but also enslaves us.*” This is not a sudden realization but it has its roots in the planning process of the country. However it is important that this kingdom has reasoned the sustainability of such progress.

Apart from the concern felt for satisfaction and happiness, Bhutan is aware of certain approaches to development which might lead to an increase in unhappiness and dissatisfaction. Therefore it minimizes such compulsive initiatives which might lead to unhappiness and dissatisfaction. The king has been conveying his opinion through various modes on the five year plans, stating that “*if at the end of a plan period, our people are not happier than they were before, we should know that our plans have failed.*”<sup>26</sup>

Schell (2002) observed that “*Bhutan has passed an important milestone in convergence with the outside world.*” The nation which was totally isolated from the outer world before 50 years has responded to the changes in a very remarkable way and given more importance to human and social development. It was possible for the nation to concentrate on economic development and attain faster economic growth by compromising on the people well-being, but it opted for a more sustainable approach and succeeded in maintaining peace and tranquility in the nation. The first written constitution<sup>27</sup> is now in the public domain for discussion and comments are invited from the public. The preamble of the constitution ensures to *enhance unity, happiness and well-being of people for all time to come.* The government has promised that it would distribute a copy of the constitution to every citizen of the nation which would be open for debates and discussion.

## Discussion and conclusion

Happiness should breed development. By initiating the policies to provide happiness to the general masses, development (human, social as well as economic) can be achieved. To assure this, policy would have to have a different direction for public spending and investment. Such policy directions are prevalent in Bhutan and it could be one of the reasons for which it has been put in the category of fast track countries.<sup>28</sup> Further, Bhutan has topped<sup>29</sup> the list of best performers so far as the reduction in child mortality rate is concerned during 1990–2002. Bhutan has followed unique style of development which has helped this tiny nation to grow from strength to strength. *Bhutan has been one of the most successful countries in South Asia in its development and delivery of social welfare.*<sup>30</sup>

The policies are monitored and evaluated against the single criterion of their impact on GNH. *Today, conditions in Bhutan are very different from what they were in the sixties. Over 90% of the population has access to primary health care and 65% of the rural population has access to safe drinking water. More than 90% of children are immunized. Iodine deficiency disorder has been virtually eliminated. Life expectancy at birth has gone up to 66 years. Adult literacy, however, remains low at 54% though the gross primary enrolment rate is estimated to be 72%.*<sup>31</sup> The infant mortality rate (per 1000 live births) has gone down dramatically from 142.8 in 1984 to 70.7 in 1994 and to 60.5 in 2001.<sup>32</sup> The overall access to safe drinking water<sup>33</sup> has gone up from 45% in 1994 to 77.8% in 2000.<sup>34</sup> The life expectancy at birth (years) has gone up from 47.5 in 1984 to 66.1 in

1994.<sup>35</sup> The population growth rate has been brought down from 3.1% in 1994 to 2.5% in 2000.<sup>36</sup>

This path of development seems to be making sense. Researchers are busy finding out the ways to quantify GNH so that it is comparable. It is suspected whether the countries having higher per capita GDP would count higher on the scale of GNH also. *“While cynics may dismiss those words (GNH) as a catchy sound-bite, the fact is that the underlying philosophy has been a consistent guiding principle in the development of Bhutan and continues to be the fundamental consideration in the formulation of development policies for the future.”*<sup>37</sup> Bhutan can lead the breed of the GNH economists who can tell the world that even within lot of constraints and having been under pressure, it can sustain its developmental process. GNH is a phenomenon which has transpired the citizens of this kingdom to put forth their efforts to maintain peace, tranquility and sovereignty. It has been able to communicate the ultimate goal of humanity in a very convincing way to its planners and administrators for policy decisions as well as their implementation.

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*If it is medicine, you should take it from an enemy.  
But if it is poison, you should refuse it from a friend.*

[A Bhutanese saying]

## Notes

- 1 This statement is given by the King Jigme Singye Wangchuk and can be found in many published documents of the kingdom. (e.g., BNHDR 2000, p. 1; RGOB 2002, p. 4; Thinley 1999, p. 12–13 etc.)
- 2 Easterlin 2001, p. 465; also see Thinley 1999, p. 20.
- 3 also see Frey & Stutzer 2002a, p. 8.
- 4 See Frey & Stutzer 2002a, p. 12.
- 5 UNMP 2005, p. 1.
- 6 A paper by Chris Whitehouse entitled “The Ants and the Cockroach – A Challenge to the Use of Indicators’ website ([http://hdr.undp.org/network/attachments/Bhutan\\_TheAntsandtheCockroach\\_discussionpaper-andresponse.pdf](http://hdr.undp.org/network/attachments/Bhutan_TheAntsandtheCockroach_discussionpaper-andresponse.pdf)) viewed on 4.04.05
- 7 see Easterlin 1974; Easterlin 1995; Oswald 1997; Veenhoven 1995, for the study of developed nations and Graham and Pettinato 2001; Graham & Pettinato 2002; Graham 2004; Lokshin & Ravallion 2002 on Russia, Peru and Latin American Countries; Ng 2002 for East-Asia; Diener & Oishi 2005 for comparison between Scandinavians and Asians. Also see Offer 2000; Easterbrook 2003 for American experience of happiness and the causes of unhappiness in the last 50 years.
- 8 Hunt 1980, p. 243.

- 9 A Quiet Revolution in Welfare Economics by Michael Albert and Robin Hahnel ([www.zmag.org/books/quiet.htm](http://www.zmag.org/books/quiet.htm)) Chapter 5. viewed on 4.04.05.
- 10 Haslag, 1997, p. 14.
- 11 A Brief Note on Bhutan:  
 “It is believed that the name Bhutan is derived from the Sanskrit ‘Bhotant’, meaning ‘the end of Tibet’, or from ‘Bhu-uttan’, meaning ‘high land’. Historically the Bhutanese have referred to their country as Druk Yul, ‘land of the thunder dragon’. Bhutanese refer to themselves as Drukpa people.” (<http://www.kingdomofbhutan.com/kingdom.html>)
- The Royal Kingdom of Bhutan is a tiny mountainous country situated between the two most populous nations of the world, India and China. It was in 747 AD when guru Padmasambhav visited Bhutan from India and introduced Buddhism. Bhutan has been practising Buddhism and it is a religious country. In 1907 the monarchy system was started in Bhutan by the first monarch Ugyen Wangchuk who was given knighthood by British Raj. Subsequently he attended Delhi Durbar in 1911. It was in 1926 when the eldest son of the first king, Jigme Wangchuk took over the reign from his father. His rule was one of the most important periods since it was during this period that there was social, economic and political instability internationally. Bhutan maintained its independent status through the policy of non-engagement. The third king, Jigme Dorji Wangchuk, became king in 1952. He introduced land reforms, reduced land taxes, established Royal Bhutan Army (RBA), National Assembly, Planning Commission, and Royal Advisory Council, launched Five Year Plans and abolished capital punishment. Bhutan became a member of United Nations Organization in 1971. Jigme Singye Wangchuk, the fourth in the line of the Wangchuk dynasty was coroneted in 1974. Bhutan became a member of the World Bank in 1981. The period between 1907 and 1998 is seen as a period of consolidation and development of instruments of power. The functioning of the government is streamlined and the priorities properly set. In 1998 the king devolved all the executive powers to the council of ministers elected by the national assembly. This can be seen as a beginning of a new political era in the History of Bhutan. “Bhutan is also well endowed with other natural resources with a rich forest cover of 72.5%, and various mineral resources that include limestone, dolomite, gypsum, coal, copper, talc, marble, quartzite, zinc and lead. Bhutan’s pristine nature, bio-diversity and unique cultural heritage also make for an attractive and exotic tourist destination.” (RGOB 2001, p. 4)
- It is estimated that Bhutan had 0.65 million population in the year 2000 with around 80% rural population. Around 80% population is of Mongo origin (*drukpas*) and the remaining 20% Indo-Aryan (*Nepalese*). The country has 20 *Dzonkhags* comprising 201 *Gewogs*.
- 12 Gayleg 2004, p. 622.
- 13 Mathou 2000, p. 240.
- 14 BNHDR 2000, p. 20 – see RGOB 2000a
- 15 Hargens 2002, p. 32.
- 16 Powdyel, T.S. Gross National Happiness: A Tribute. ([www.windhorsetours.com/ugen/bhutan.htm](http://www.windhorsetours.com/ugen/bhutan.htm)) viewed on 10.04.04.
- 17 Veenhoven 2004, p. 332.

- 18 RGOB 2000b, p. 18.
- 19 RGOB 2002, p. 3.
- 20 Statistical Year Book 2004 – see RGOB 2005.
- 21 RGOB 2002, p. 30.
- 22 As mentioned in RGOB 2000b, three factors (continuous culture, environment and Vajrayana Buddhism) have been of the greatest influence for Bhutan’s development. It is of strength for Bhutan that it has never been colonized or conquered, so the culture has been maintained continuously in all the times. The prevalent Buddhist culture considers nature and man as mutual friends and there is a special symbolic relationship between the people and nature, since Bhutan follows Vajrayana Buddhism in its development policies.
- 23 RGOB 2000b, p. 63.
- 24 *ibid* p. 92 (it was proposed to increase the number of ministries and later it has been done)
- 25 Kuensel is Bhutan’s only national weekly published from Thimphu, in English, Dzongkha and Lotshampa.
- 26 Quoted in Powdyel, 2004.
- 27 Available on web [www.constitution.bt](http://www.constitution.bt).
- 28 Bhutan has been identified as MDG fast-track countries on the basis of governance qualification. See UNMP Report 2005, p. 234.
- 29 As per the HDR 2004, in 1990 the child mortality rate in Bhutan was 166 per 1000 live births which reduced to 94 in 2002. Bhutan occupied the top position amongst the countries where child mortality had fallen during 1990–2002 period followed by Guinea (-71), Bangladesh (-67), Egypt (-63), Lao PDR (-63), Eritrea (-58). See HDR 2004, Table 3, p. 132 (for HDR 2004 – see UNDP 2004).
- 30 Rutland 1999, p. 289 (Rutland has compared some indicators such as life expectancy, mortality rate, no. of hospitals, students, teachers and telephones) (also see Frame 2005, p. 217).
- 31 BNHDR 2000, p. 7 – see RGOB 2000a.
- 32 Statistical Year Book 2004 (Table 1.5) – see RGOB 2005.
- 33 Safe drinking water is defined as piped water from protected spring source, available to the household within 50 meters vertical height and 100 meters horizontal distance. See RGOB 2002, 9<sup>th</sup> FYP Document, p. 76.
34. National Health Survey 1994 & 2000 – see RGOB 1994 & 2000c.
35. Statistical Year Book 2004 (Table 1.5) – see RGOB 2005.
- 36 RGOB 2002, p. 76.
- 37 Rutland 1999, p. 284.

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# 10

## An Exploratory Study of Resilience Among Hong Kong Employees: Ways to Happiness\*

*Oi-ling Siu, S.L. Chow, David R. Phillips and Lin Lin*

### Introduction

At the turn of the 21<sup>st</sup> century, a positive psychology approach is strongly advocated in the United States. Many American psychologists have turned their attention from repairing weakness and damage to promoting human virtues (Seligman 2002). According to Seligman (2002), “the aim of positive psychology is to catalyze a change in psychology from a preoccupation only with repairing the worst things in life to also building the best qualities in life (p. 3)”. Seligman further suggested that there are human strengths that can act as buffers against stressed mental illness. These buffers are courage, optimism, interpersonal skills, faith, hope, honesty, perseverance, resilience, putting troubles into perspective, and finding purpose.

Some literature review indicates that employees with positive human functioning report better psychological well-being and job performance (Estrada, Isen & Young 1997; Judge, Erez & Bono 1998). For example, Estrada *et al.* (1997) concluded that positive affect (positive emotion) facilitates performance among physicians. Furthermore, Wright and co-workers provided evidence to support the “happy-productive” hypothesis (Wright & Staw 1999). Tedeschi *et al.* (1998) suggested that it is better not to talk about Posttraumatic Stress Disorder (PTSD) but, rather, to investigate how to promote Posttraumatic Growth (PTG) in overcoming adversity (Affleck & Tennen 1996). Posttraumatic growth appears to be related to constructs of resilience, hardiness, thriving, stress inoculation, or toughing.

We therefore propose to enhance some human virtues as adaptive coping strategies among employees in Hong Kong. It is important to introduce the idea of individual resilience or, specifically, facets of

stress resiliency (such as positive affect or emotion) in the face of adversity.

### **Resilient personality**

Ryff and Singer (2003) defined resilience as the maintenance, recovery, or improvement in mental or physical health following challenge. As they suggested, a resilient personality possesses the following facets: physical health, psychological well-being, assertiveness, is verbally expressive, energetic, dependable, open-minded, smart and self-confident. Personality characteristics have also been of considerable interest to researchers studying relations between job stressors and indexes of strains (Cooper, Dewe & O'Driscoll 2001). Personality may play an important role in the stress process by influencing individuals' exposure to stressful events. In the job stress literature, the construct of *hardiness* or the "hardy personality" (Kobasa 1979) has been considered as a resilient quality of an individual's personality. This quality moderates the effects of environmental stressors on individuals' experience of strain and poor health or illness. However, criticism has been raised concerning the measurement of hardiness and there is a lack of consistent evidence for the buffering effect of hardiness. These point to a need for the development of a tightened construct of resilient personality as a means to understand how resilience may ameliorate or alleviate the negative effects of stress.

Ryff and Singer (2003) proposed that promotion of human resilience and development of measures of resilient personality are important venues in positive psychology. Masten and Reed (2002) referred to resilience as a class of phenomena characterized by patterns of positive adaptation in the context of significant adversity or risk. In simpler words, resilience describes the capacity to prevail in the face of adversity.

A review of the literature on children, adults, and older persons in Western societies showed factors conducive to resilience to include: positive affect, assertive, verbally expressive, energetic, dependable, open-minded, smart, self-confident, self-efficacy, self-worth, flexible self-concept, and internal locus of control (Masten *et al.* 1990; Ryff & Singer 2003) (see Figure 10.1).

There is evidence that each of the following constructs predicts resilience: self-mastery (Pearlin & Schooler 1978), hardiness (Kobasa 1979), hope (Snyder 1994b), and self-efficacy (Bandura 1986). Based on research findings in Western societies (e.g., Carver 1998), several facets of resilient personality (including positive affect, self-efficacy, internal

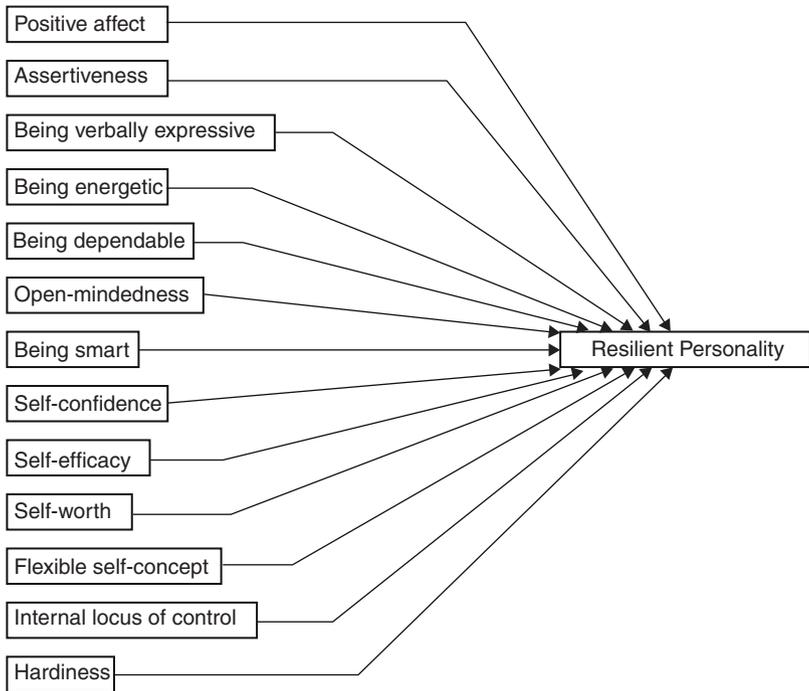
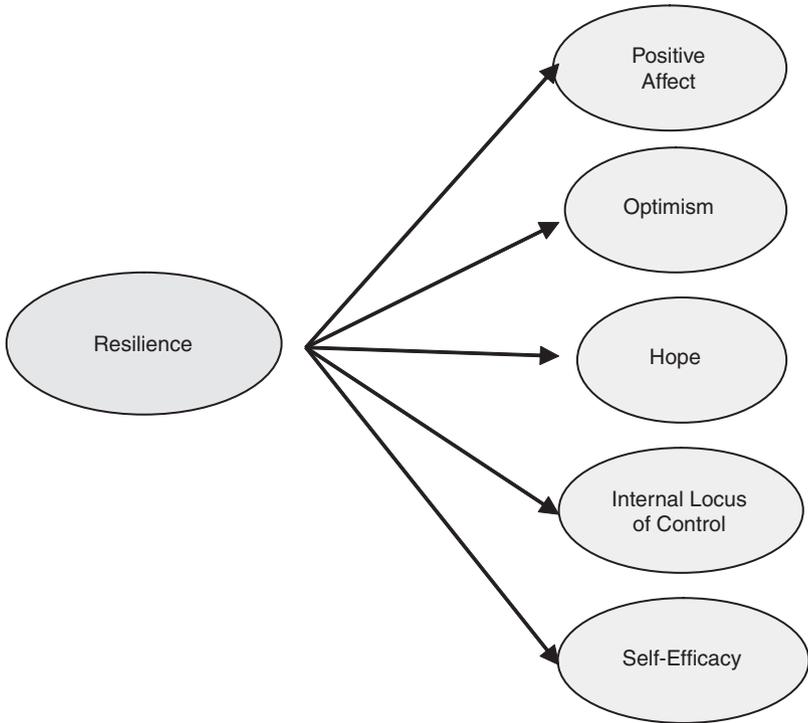


Figure 10.1 Factors conducive to resilience

locus of control, and optimism) were hypothesized to be also applicable to Hong Kong employees (see Figure 10.2).

### Positive affect

Positive affect, also called positive emotions, implies the experience of pleasant emotions comprising joy, contentment, excitement, affection, energy, and happy feelings. As far as its influence on one's life, the overall balance of people's positive and negative affects has been found to contribute to their subjective well-being (Diener, Diener & Diener 1995). Yet it is also argued that positive affect is not only a signal of optimal functioning, but it also produces optimal functioning (not just within the present pleasant moment but long lasting as well). In other words, positive affect may help individuals to achieve positive outcomes. This was supported by the research finding that happy people even make more money than unhappy ones (Estrada *et al.* 1997). Moreover, positive affect can promote one's prosocial behavior. Even a



*Figure 10.2* Facets of a resilient personality

mild positive affect could reduce conflict in organizational settings. Furthermore, positive affect can facilitate cognitive flexibility, creativity and innovation.

### **Optimism**

Optimists are people who expect good things to happen to them. By contrast, pessimists are people who expect bad things to happen to them (Carver & Scheiver 2002). Optimists and pessimists differ in how they approach problems, challenges, and they differ in the manner, as well as the success, with which they cope with adversity.

To reiterate, the most important difference between optimists and pessimists is the degree of subjective well-being they feel. When people confront adversity or difficulty, they experience a variety of emotions, ranging from excitement and eagerness to anger, anxiety, and depression. According to Carver and Scheiver (2002), the balance of these

feelings appears to relate to people's degree of optimism or pessimism. Optimists often find dealing with adversity enjoyable. They are quicker to accept challenges, and they engage in more focused, active coping (Carver & Scheiver 1998).

## Hope

The theory of hope has a long history. As summarized by Snyder, Rand and Sigmon (2002), in the 1950s through 1960s, hope was viewed by many previous scholars as the perception that one's goals can be attained. In the late 20<sup>th</sup> century, more and more social scientists have turned their attentions to hope. Snyder *et al.* (2002) summarized that hopeful thought reflects the belief that one could find pathways to desired goals and become motivated to use those pathways. In such a view, hope is an element of a healthy cognitive element. It serves to drive an individual's emotions and well-being. Hope may be emotion-based or cognition-based. An emotion-based hope deals with the difference between expected positive and expected negative affect, while the cognition-based hope enables an individual to work towards goals (Snyder 1994a).

By adding hope as a facet of resilience, we have yet another research framework for understanding and enhancing adaptive ways of functioning. Based on presently available research with students, it appears that hope bears a substantial relationship with academic achievement (Snyder, Cheavens & Michael 1999). Hope relates to higher achievement test scores and higher semester grade point averages (e.g., Curry *et al.* 1997). In the field of health psychology, hope has been positively implicated in areas such as promoting and maintaining good health and preventing, detecting, and treating illness (e.g., Snyder 1994b, 1998). As far as psychological adjustment is concerned, hope works through the belief in one's self. As is the case with physical health, hope is also crucial for psychological health. Hopeful thought entails assets such as the ability to establish clear goals, to devise workable pathways, or to motivate oneself to work toward goals. Psychological health is related to people's routine anticipation of their future well-being. In this regard, those with higher levels of hope should anticipate more positive levels of psychological health than persons with lower levels of hope.

## Locus of control

Human beings have a universal motive to exert control or mastery over their environments. Having a sense of control is said to be a critical

element in successful psychological adjustment to not only work but also other domains of life. Locus of control is a bipolar construct. The two poles are internal locus of control and external locus of control. People having internal locus of control (called “internals” henceforth) believe that everything is under their control. By contrast, individuals having external locus of control (called “externals” subsequently) consider that they are destined by something beyond their control, such as fate. Generally, internals report better well-being than externals (Spector 1982). Many studies conducted in work settings in Greater China (HK, PRC and Taiwan) revealed that externals reported lower job satisfaction, worse mental well-being, and greater quitting intention (Siu and Cooper 1998; Siu *et al.* 2002). Locus of control clearly fits into the positive psychology paradigm because it emphasizes those areas in which the individuals can exercise control over his or her own development and psychological well-being while recognizing that some situations or events are out of his or her control (may not be worth fighting against).

### **Self-efficacy**

According to Bandura (1997), the most important determinants of the behaviors people choose to engage in and how much they persevere in their efforts in the face of obstacles and challenges are “people’s beliefs in their capabilities to produce desired effects by their own actions” (p. 7). This is the basic premise of self-efficacy theory. Many researchers agree that a sense of control over our behavior, our environment, or our own thoughts and feelings, is essential for happiness and a sense of well-being. When the world seems predictable and controllable, and when our behaviors, thoughts, and emotions seem to be under our control, we would be better able to meet life’s challenges, build healthy relationships, and achieve personal satisfaction and peace of mind.

From this perspective, we can infer that self-efficacy can improve happiness at work by enhancing confidence. When people encounter difficulties, self-efficacy can enhance resilience from adversity.

Some recent studies on self-efficacy at work have revealed that stressors would be much more threatening to those who have low confidence in performing their job tasks. Individuals with high self-efficacy are more likely to believe that they can maintain high level of job performance despite the presence of challenging job-related stressors.

Furthermore, the research evidence of managerial self-efficacy (MSE), a certain specific type of self-efficacy, which is more powerful in predicting what people will do in workplaces, reveals that MSE is posi-

tively related to job performance, work attitudes and job satisfaction. Managerial self-efficacy is also found to be negatively related to physical and psychological strains (Lu, Siu & Cooper 2005).

### **An exploratory study of resilience among employees in Hong Kong**

There is a growing research literature on children resilience (Masten *et al.* 1990) and also resilience in later life (Ryff & Singer 2003) in the context of life challenge and adversity. However, studies on employees' resilience are fewer, and studies examining the role of resilience as a stress moderator among employees in Hong Kong and other Asian cities are almost non-existent. Furthermore, there has been considerable debate and confusion about defining resilience. It is important to find out the key protective factors and resources that account for resilience.

The objectives of the study are to investigate correlates of resilience among Hong Kong employees, and to examine the relationship between resilience and work well-being (including perceived work pressure, job satisfaction, and physical/psychological symptoms) and job performance. Work well-being not only implies absence of illness or diseases, but includes job satisfaction, physical and mental health (Warr 1987). Therefore, work well-being is one component of happiness which can fit in the study of positive human functioning.

Based on the review of the previous literature, as depicted in Figure 10.2, we hypothesized that resilience comprises positive affect, self-efficacy, internal locus of control, optimism, and hope. We also hypothesized that employees with high resilience scores would report lower levels of perceived work pressure, fewer physical/psychological symptoms, but higher levels of job satisfaction and job performance. Concerning the role of positive affect, based on the "Happy-Productive Hypothesis", we expected employees with high levels of positive affect would report better job performance.

### **Method**

A self-administered questionnaire survey method was adopted for data collection. A purposive sampling method was adopted to recruit 10 companies for the study from July to October 2004. The selection of companies represented a wide variety of occupational groups, which were representative of Hong Kong's major employee sectors: teaching professionals, banking and insurance, property and estate management, transportation, catering, and personal/health care employees. A detailed description of the sample characteristics is depicted in Table 10.1.

**Table 10.1** Sample characteristics of the ten companies

<i>Participating organizations</i>	<i>Occupational group</i>	<i>N</i>	<i>Job Level</i>
Company 1	Education (a secondary school)	29	Secondary school principal, teachers, and administrative staff
Company 2	Health care (a nursing home for older persons)	25	Nurse and assistant worker
Company 3	Property and estate management	30	Junior executive and administrative staff
Company 4	Banking	76	Junior executive, middle management staff, and frontline staff
Company 5	Legal profession	15	Judicial supervisor and court interpreter
Company 6	Transportation	58	Operation and maintenance
Company 7	Catering	25	Management staff and frontline staff
Company 8	Insurance	16	Middle and senior management staff
Company 9	Catering	12	Management staff and frontline staff
Company 10	Personal care (social services)	31	Social work officer

The recruited participants were invited to attend a seminar on stress management and the survey was conducted before the seminar. The participants were promised to be provided with their personal profiles in the stress audit as a free service in order to compensate for their time in filling in the questionnaires. Items were constructed or adapted based on Western measures.

### **Results of the study**

The relationships among stressors, stress moderators and stress outcomes were found in the expected directions (see Table 10.2). In general, participants who scored higher in resilient personality reported lower levels of work pressure, fewer physical/psychological symptoms, higher levels of

Table 10.2 Intercorrelations among variables

	1	2	3	4	5	6	7	8	9	0
1. Self-Efficacy	0.86									
2. Optimism	.449**	0.81								
3. Internal locus of control	.220**	.216**	0.80							
4. Hope	.626**	.603**	.244**	0.77						
5. Positive affect	.468**	.594**	.214**	.541**	0.87					
6. Resilience	.763**	.519**	.240**	.642**	.467**	0.78				
7. Perceived work stress	-.171**	-.288**	-.174**	-.204**	-.244**	-.190**	0.82			
8. Physical/psychological symptoms	-.266**	-.410**	-.177**	-.310**	-.351**	-.286**	.483**	0.84		
9. Job satisfaction	.324**	.323**	.334**	.293**	.416**	.326**	-.231**	-.198**	0.86	
10. Self-rated job performance	.365**	.377**	.115*	.403**	.300**	.443**	-0.02	-.139*	.196**	0.70

Note. Reliabilities are shown in diagonal. \*  $p < .05$ , \*\*  $p < .01$

job satisfaction and better job performance. In our empirical study, we also found that employees who scored higher in positive affect scored higher in job satisfaction and job performance, but lower in perceived work stress and physical and psychological symptoms.

## Conclusion and future research

Our study is the first to demonstrate empirical support for the beneficial role of resilience and positive affect in the workplace. It can be concluded from the results of our study that the “Happy-Productive Hypothesis” can be supported. It seems that resilience can buffer an individual from stress. The results of our study have many implications for human resource management practices specifically in training staff on the virtues of resilient personality and positive emotions in the workplace. Employers or human resource managers should have the mission of training facets of resilience, including optimism, hope and self-efficacy among employees. Furthermore, ways of encouraging employees to form “happiness habit” are highly recommended. We also suggest future inquiry should assess resilience with indicators that encompass more components of wellness.

The limitation of the study is the non-representative nature of the sample recruited. As the participants were recruited by inviting them to attend a seminar on stress management, this would have made the sample biased in favour of those with higher stress problems.

## Notes

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# 11

## Fun, Fervor or Fitness?: Sporting Cultures and Happiness

*Brian Bridges*

“Once it has sunk in today, the singing in the chapels will be heavenly and afterwards the pubs will be joyfully overflowing and the Welsh womenfolk will be baking their Welsh cakes and taking their men to their bosoms. Which is what rugby is all about.” [*The Observer*, 7 February 1993, reporting on an unexpected victory by Wales over England at rugby, cited in Maguire 1994, p. 412]

“It wasn’t until you were driving down the motorway and people were beeping their horns at you and waving and giving you thumbs up that you realised what had been achieved. It was then that you started to realise what it meant to people, everyday cricket watchers.” [England player Graham Dilley recalling the aftermath of England’s victory over Australia at cricket in July 1981, voted “Britain’s Most Memorable Sporting Moment”, cited in Steen and McLellan 2001, p. 166]

All cultures have played games or sports, although the forms and formats have undoubtedly changed over time. Today, for many people sport is about exercise, leisure, and doing things for fun, but clearly it is also much more than that. At an institutionalized level sport is an activity that is both strenuous and involves competition, sometimes intense competition. Yet it should also be enjoyable for both players and spectators. According to one nineteenth century etymologist, sport means “mirth”, being derived from the medieval English word “disporten”, to amuse (Tomlinson 1999, p. 5).

Derived from a range of cultural and historical influences, modern sports reflect the societies in which they are found. Although only a

minority of the population are actively engaged in regular sporting activities, many more people are interested in following – or consuming – sport. The media coverage of sports and the sporting – and non-sporting – activities of sports stars seems only to be increasing. We seem to have more and more sports programs, dedicated sport channels, sports pages in the newspaper, and internet links to give us “live” coverage of sporting events around the globe. Although sports activities, or at least the training for them, can be a rather lonely preoccupation at times, many people (though mostly males) will quickly slip into conversation on sporting topics. Sporting expressions have become accepted into everyday language: “level playing field”, “ballpark figure”, “spoil-sport”, “throw in the towel” and so on. Sport has become increasingly internationalized as multinational companies become involved in sponsoring major sporting events, marketing sports stars and utilizing star endorsements for a wide range of products. Sport, indeed, has become an essential part of society, even invented ones: fans of Harry Potter will note the importance given to the games of Quidditch at Hogwarts Academy (Pooley 2003, p. 49).

Sport can affect individuals and societies in different ways. In terms of values, it has been associated with positive values, such as fair play, teamwork, and self-discipline, but also negative ones, such as uncritical obedience to authority, aggression, and gamesmanship. Undoubtedly, in physiological and psychological terms, playing sport can cause physical, mental and emotional stress, but it can also be positive in that it produces physical and mental growth, heightened self-esteem and a sense of achievement.

Starting from the assumption that happiness is a desirable human condition, can we say that sport is really important to people and society as far as achieving happiness is concerned? Jeremy Bentham’s concept of utilitarianism, expressed through the maxim of the “greatest happiness of the greatest number”, can be a useful starting point for discussing the nature and determinants of happiness, although, as Lok Sang Ho has argued, happiness is a far more complicated concept than utility (Ho 2005). In this context, it might also be helpful to consider John Stuart Mill’s ideas on utilitarianism as well, since he proposed a qualitative distinction between “higher” and “lower” pleasure; true human happiness, in his view, requires at least some exposure to activities that gratify the higher faculties of the human mind (intellectual complexity and/or aesthetic value). In which category does sport fall? Some sports and games are undoubtedly intellectually complex (chess and “go” would be examples), while others certainly have aesthetic value (diving, figure-skating, gymnastics). Mill seems not to have com-

mitted himself directly on the question of sport, but it is “more likely that [he] viewed sport as a form of diversion or recreation, and thus as a lower pleasure” (see the cogent analysis by Schwartz).

Whether or not sport is to be viewed as a higher or lower form of pleasure, it seems that sport can be linked to happiness through two dimensions. The first is the way in which participating in and/or watching sport can cause enjoyment and therefore contribute to the overall happiness of a person. The second is that participation in sporting activities can not only bring physical health benefits but also positive psychological well-being which in turn are part of achieving a state of happiness.

This chapter takes the example of Hong Kong, whose sporting development is surprisingly under-researched, as a case study in order to examine the attitudes of four “actors”, namely, the government, companies, fans and ordinary people towards the “utility” of sport, with the aim of trying to establish whether playing or watching or even just encouraging sport contributes to happiness. As such, it is proposed that a typology of four categories be analyzed, using the following framework.

fans	———	watching and supporting
general public	———	exercise and health and socializing
companies	———	image and sponsorship and profit
government	———	social cohesion and health and patriotism and revenue

Before entering into this discussion, it might be helpful to understand something of the historical development of sport in Hong Kong.

### **Sports development in Hong Kong**

As in many British colonies, the development of modern sport in Hong Kong was strongly linked to the British predilection for taking their sports with them as their “chief spiritual export” wherever they conquered territories (Morris 1968, p. 283). Although the British forces and expatriates set up sporting clubs from the 1850s (the Hong Kong Cricket Club, for instance, was set up in 1851), in those early days the Chinese residents of Hong Kong had little interest in “foreign” sports. However, by the early twentieth century, some Chinese joined in the clubs, if only because they felt the need to interact more with British residents, while missionary schools in particular introduced sports into the school curricula (Fu 1993, pp. 1–2). Nonetheless, outside the expatriate-dominated

clubs, sporting activities were haphazard and limited. Published histories of Hong Kong in the nineteenth and twentieth centuries rarely, if ever, mention sporting activities, apart from the almost inevitable reference to the local and expatriate enthusiasm for and patronage of horse racing.

Indeed, arguably, not until the early 1970s, with the creation of the Council for Recreation and Sport, did the Hong Kong government begin to take sports development for the majority of the population seriously. Even then, the impetus seems to have come from a desire by the government to control social disturbances in the aftermath of the 1967 riots by providing alternative, non-political, avenues for releasing emotional energy and building responsible citizenship (Fu 1993, p. 2; Vertinsky *et al.* pp. 822–3). In due course, in the late 1980s and early 1990s, the Hong Kong Sports Institute (HKSI), for training elite athletes, and then the Hong Kong Sports Development Board (HKSDB) were set up, although the government itself tried to devolve more responsibility down to the Urban and Regional Councils. In recent years, the relationship between the HKSI and the HKSDB has been rearranged several times, culminating in late 2004 in the HKSDB's merger into the HKSI and the creation of a new Sports Commission, which is tasked with bringing more coherence to the development of sport in Hong Kong.

Hong Kong has competed regularly in international sports competitions such as the Olympic Games, the Asian Games, and, until 1997, the Commonwealth Games. However, Hong Kong's sporting record has been rather poor, at least until the last decade, when it seems that some of the efforts put into developing talent have begun to pay off. Hong Kong has won a total of 75 medals at 14 different Asian Games since 1951, but more than half of them were won at the 1998 and 2002 Games. Crucial in raising public awareness, however, was Lee Lai-shan's gold medal for windsurfing at the 1996 Atlanta Olympic Games (the first ever Olympic gold for a Hong Kong athlete). But the next Olympic success did not come until the 2004 Athens Olympics, when Li Ching and Lo Lai-chak won a silver medal in table tennis, but their success was tempered by some concerns over whether these China-born and trained athletes should really count as "Hong Kong players". Having failed itself to win a bid to host the 2006 Asian Games, Hong Kong has, of course, been much interested and enthused by the successful Beijing bid to host the 2008 Olympic Games, which now will see equestrian events being held in Hong Kong, and, to a lesser extent, by its own success in gaining the 2009 East Asian Games.

## Fans

Who is a “fan”? At its most simplistic, as its derivation from the word “fanatic” implies, it is someone who has an intense, some would say obsessive, interest in a certain team, player or sport. However, as Garry Crawford argues, the definition has been complicated by disputes over what constitutes a “real” fan: someone who loyally goes to watch his/her team every week or those who sit at home watching games on the television? (Crawford 2004, pp. 21–3). Social context, time and even geography will undoubtedly have an effect. While the sensory atmosphere of attending a live event or match is certainly a contributing factor to enjoyment, even Hong Kong fans of Liverpool FC (the most famous fan being former Chief Executive Tung Chee-hwa) who have almost no chance of seeing their heroes play in the flesh (apart from one visit by the team to Hong Kong in 2002) can still be considered “real” fans. Although a recent study by Daniel Wann and his colleagues suggests that identification with a distant – as opposed to a local – team does not have strong correlation with psychological well-being (Wann *et al.* 2004), for football fans in Hong Kong, with very limited quality live football on offer in Hong Kong football stadiums, the chance to meet up with fellow fans, even if only in a bar or sports club watching cable television broadcasts, can nevertheless contribute positively to well-being.

Being a fan means, of course, embracing both triumph and disaster – the thrill of victory and the agony of defeat. Although the increased attention of international and local media has tended over time to increase the stakes for teams and individuals to win and triumph, it has to be said that, ironically, for most of us sport is more often about losing and facing failure. Either our own performance or that of the team/celebrity that we support does not come up to expectations. But at the same time, we also have great moments of joy when we ourselves or our team do well, particularly when going beyond our expectations (see the two quotations at the start of this chapter). The fun of winning gives us an adrenaline surge, but losing usually holds out at least the prospect that there will be other times and other results. Perhaps it is the uncertainty of it all which is appealing. Despite all the modern training, testing and analysis beforehand, we still cannot predict with certainty what will happen from moment to moment within a sporting event.

To what extent do fans of sport exist in Hong Kong? One indicator would be to look at spectators of sport in Hong Kong. Spectator levels

for all forms of sporting activities (excluding horse-racing) have remained comparatively low in Hong Kong. Fu's survey of the preferences of Hong Kong schoolchildren when watching sport, showed an overwhelming bias in favor of football/soccer (53%), with next most popular, table tennis, only registering 7% (Fu 1993, pp. 19–23). Yet the number of people, whether schoolchildren or adults, who attend matches in the Hong Kong football league is miniscule. A former vice-president of the Hong Kong Football Association, David Akers-Jones, in his memoirs, recalls soccer matches attracting "many thousands" in the 1970s (Akers-Jones 2004, p. 87), but data supplied by the Hong Kong Football Association suggests that during the 2002–03 season a combined total of 30,143 paying spectators watched 56 league matches, which averages out at 538 people per game! For comparison purposes, the Hong Kong Derby Day at Shatin on 17 March 2002 recorded 39,194 spectators on a single day. Sell-out crowds, up to 40,000, will appear for visits by foreign football teams, such as Real Madrid, Manchester United and Brazil, but clearly those fans who follow their teams regularly week in and week out are in limited supply.

With the widespread availability of international sporting events, not only football but also basketball and tennis, on television and the internet, local sport suffers by comparison. An informal survey conducted by my students amongst themselves in 2004 showed that 94% watched soccer on the television, but only 2% ever went to watch local soccer games. The same will almost certainly apply to other internationally-broadcast sports. According to purists, therefore, few fans of sport in Hong Kong would fit into the category of "real" fans if that definition is applied only to those who regularly go to watch sport in action in the flesh as it were. Nonetheless, we can assume, however, that there are many more "fans" in Hong Kong who like to watch sport on television. Another survey showed that of those Hong Kong people who self-classified themselves as not exercising regularly, 59% admitted to watching sport on television (*South China Morning Post*, 30 October 2003). It is quite likely that Hong Kong youngsters also engage in playing video games related to sport. Their pursuit of happiness is no less real for that.

### **General public**

A recent survey by the HKSDB concluded that Hong Kong has "an underdeveloped sports culture relative to many other countries" (HKSDB 2003a). This can be substantiated through the awareness of

sports, the participation rates and the spectator support rates of the Hong Kong people mentioned above and also through Hong Kong's relatively poor sporting achievements in international competition.

An informal survey drawn from written answers given by students in my sports course in 2005 suggested a wide range of reasons for the comparative poor record of sporting activity in Hong Kong and its "underdeveloped" sporting culture. However, the two most frequently cited were: the past lack of encouragement by the British colonial government (because the British feared "nationalism") and family pressures to concentrate on study rather than sport (which offered few if any employment prospects). The governmental perspectives will be discussed below, so here emphasis will be put on the Chinese perspectives on the value of sport.

Frank Fu's surveys in the early 1990s showed that in Hong Kong both students and adults have been becoming more health conscious and as such participating in sporting activities was perceived as being beneficial to their health. At the same time, Hong Kong people also thought that sport helped them develop a sense of belonging (to a team or club) and it also would help them to make new friends and socialize with them (Fu 1993, pp. 7–10). These attitudes seem to have remained constant over time, for in a 2004 survey by the Hong Kong Federation of Youth Groups 71% of the young people interviewed thought that becoming physically fit was an advantage of participating in sport and 32% gave making friends as another positive aspect (University of Hong Kong 2005). However, the reality may be slightly different from the perceptions, in so far as this appreciation of the benefits does not translate into high levels of sports participation. The HKSDB's survey of sports participation in the year 2000 showed that although 81% of those interviewed agreed sports participation was good for their health, only about half (44%) actually participated regularly in one or more sports (HKSDB 2001a). In a recent five-year study carried by the Hospital Authority, 80.5% of the subject population were classified as "physically inactive" (*South China Morning Post* 21 October 2005).

It is to be expected that schoolchildren in Hong Kong, like schoolchildren everywhere, are required to undertake at least some compulsory physical education classes and certainly at least some schoolchildren will join after-school sports activities. There is little doubt that some Hong Kong schoolchildren, as elsewhere, dislike sport either because they feel they cannot compete on physical or skill terms or because the "forced" nature of school P.E. lessons is discouraging.

However, data on physical activity levels in Hong Kong suggest that children here do “lag behind their counterparts elsewhere in the world”; for physical development and skills they “lag significantly behind” (HKSDb 2003b).

Why might this be? The HKSDb has noted that “the many pressures on young people in Hong Kong, including an overemphasis on academic achievement, are often at the expense of their health and well-being” (HKSDb 2003b). The feelings, largely inspired by parental thinking, that sport could be a distraction from the more “important” need to study hard and that, anyway, there was no professional sports career available in Hong Kong even for the most talented youngsters were clear from my own informal survey. This view of the lack of utility for sports is widespread across Hong Kong. The HKSDb did commission a special survey correlating secondary schoolchildren’s academic grades with sporting activity and found that, at the very least, playing sport did no harm to a student’s academic performance (HKSDb 2001b). However, it is doubtful whether this message, which can be encapsulated in the “healthy body, healthy mind” philosophy, is accepted widely in Hong Kong.

So, perhaps sport at school is not much fun and parents, in a highly competitive society like Hong Kong, do little to encourage such fun through sports participation outside school hours. But, what about adults? Young adults (aged 15–24) are the most active in sports, but with declining participation until the lowest level is reached with the 45–54 year-olds (only 32% are active); those people aged above 55 are actually slightly more active (HKSDb 2001a). Amongst the reasons given for not participating in sport, the overwhelming answer seems to be “lack of time”, with “work commitments” also contributing significantly (HKSDb 2001a). Hong Kong people are often cast as being practical and utilitarian. So, sport seems not to have much utility. In which case, it has to be asked, if sport was perceived as fun would Hong Kong people make more time to play sports? Rather disturbing in this context is one survey which showed that only 7% of those surveyed considered “enjoyment” as a benefit of sports participation (Home Affairs Bureau 2002, p. 17).

Perhaps, rather mischievously, it can be suggested Hong Kong people may have been given the wrong perception of what sport is. One of the new shopping complexes in Hong Kong, the IFC Two mall, has been running a series of adverts claiming that Hong Kong has a “new arena for its favorite sports”; however, the pictures accompanying this slogan leave no doubt that shopping and dining are the so-called “sports” in mind.

## Companies

Since we tend to define happiness in terms of individuals, for the next two categories it might be better to use the concept of utility as the basis of analysis. It is of course a truism to say that sport has become commercialized or “commodified” around the globe; “sports have never been so heavily packaged, promoted, presented and played as commercial products as they are today” (Coakley cited in Crawford 2004, pp. 4–5). But is that the case in Hong Kong? On the surface, it would appear not. According to one observer, “while Hong Kong concedes sport is healthy and figure slimming, it doesn’t believe it is good business and wallet fattening” (Ellis 1999). There has been little support for professional sport in Hong Kong; “the success of professional sports leagues in Hong Kong has been negligible” (Bachner 2002).

On looking at the sponsorship of sport that does occur, two aspects stand out. Firstly, few Hong Kong companies seem to be involved in sponsoring local sports activities. As Timothy Fok, President of the Hong Kong Sports Federation and Olympic Committee, has argued: “local companies haven’t been involved much because they didn’t need to” (Ellis 1999). Secondly, corporate sponsorship has been more focused on selected “international” sporting events held in Hong Kong rather than local leagues. Major companies, such as Cathay Pacific (Rugby Sevens and Cricket Sixes), Carlsberg (Carlsberg Cup soccer), Watsons (Champions Challenge women’s tennis), and Standard Chartered (Cricket Sixes), have regularly sponsored such events. But the involvement with local sports teams and sport development programs seems much less.

Ironically, it is McDonald’s, widely criticized for encouraging junk food consumption, which has actually been one of the most active companies helping local sport, by sponsoring a youth football scheme in Hong Kong; over 7 years approximately 150,000 Hong Kong children have joined in this scheme. McDonald’s also sponsor the Olympic Day Run in the interests of what the company describes as a “balanced, active lifestyle”.

Despite some notable exceptions, therefore, it seems that Hong Kong companies have been rather reticent to sponsor sport. Perhaps, they see little prospect of “utility” for their own companies in terms of image improvement or revenue expansion. The challenge, therefore, according to Fok, is “to convince Hong Kong companies sport is the best billboard on which to advertise their wares” (Ellis 1999). Undoubtedly, the

Beijing Olympics in 2008 will be a major corporate sponsorship occasion, but how much of that money will flow into Hong Kong, as opposed to the Chinese mainland, and into Hong Kong's own sports development is open to question.

## **Government**

One of the traditional tenets has been that politics should be kept out of sports, but the reality is that governments have frequently, though often inconsistently and confusingly, intervened in sports policies in all countries. Motivations for governments supporting sport can be many, but several common ones are: (i) maintaining and improving health of citizens, (ii) promoting identity and prestige of a community or nation, (iii) increasing indirectly citizen support for a political leader or system, and (iv) economic and revenue-generating opportunities (Horne, Tomlinson and Whannel 1999, pp. 213–17).

The British may be enthusiastic about sport, but their governments have not always been good at providing a rational approach to sports development; indeed, one critic has described the sports policy community in Britain as a “disorganized shambles” for much of the post-war period (cited in Horne, Tomlinson and Whannel 1999, p. 217). It is tempting to suggest that the British colonial authorities in Hong Kong similarly failed to develop well-organized structures and policies for sports development, a legacy which has continued beyond 1997. In arguing in 2004 before the Legislative Council for the creation of the Sports Commission, HKSAR government representatives admitted that the major problems were “the lack of a central institution that takes the lead in overall policy planning, coordination, monitoring and resources allocation” and “a perceived overlap and lack of clarity in the delineation of roles and responsibilities between the various stakeholders responsible for sports development” (LegCo 2004). Now, according to the government, guided by the Sports Commission, the new visions of sport for Hong Kong will be: sport for all, sports excellence, and turning Hong Kong into a sports events capital (Sports Commission 2005).

As for sport for all, the underlying rationale is utilitarian, deriving from the belief that physical activity can be important in maintaining health, preventing lifestyle-related diseases, and enhancing well-being. As Chief Executive Tung argued in 1998: “Without question, participation in sport benefits our health and helps to generate a sense of well-being and a cohesiveness in society” (Tung 1998). Evidence of the rapid increase in obesity amongst Hong Kong youth is just one mani-

festation of the concern about the deleterious side-effects of insufficient sport participation or exercise (the Hong Kong government has noted the rising trend in obesity amongst primary school children, reaching 18.7% all such pupils in 2003–04 (*South China Morning Post* 10 January 2006)).

Sports psychologists, moreover, argue that while continuing sports participation as an adult is strongly grounded in childhood participation patterns, it is also related to family and peer group involvement. Hence, the government's encouragement to all ages, including the elderly (even if it is only tai chi or walking), to exercise regularly. The problem, however, may be the mismatch between ideals and realities, especially in a geographically-condensed place like Hong Kong, where land for sporting facilities is extremely limited and government provision seems insufficient. With few schools having their own sports fields, many beaches too polluted for swimming, most parks having signs up banning ball games and sports, and access to sporting clubs too expensive for ordinary citizens, Hongkongers have to brave the insufficient and rather uncertain public sporting facilities (for example, bloodworms were detected in several public swimming pools in 2004). The lack of suitable open places for sporting activities, either organized or informal, may well have a negative impact on individuals' enthusiasm, well-being and happiness.

Turning to the last two objectives of the government's vision, clearly there are linkages here both with the drive to locate Hong Kong as "Asia's World City" but also at the same time with the desire to develop patriotism and pride in China and being Chinese. According to the HKSDB's own commissioned study, there can be significant social benefits as well as economic benefits from developing, in particular, elite sports in Hong Kong. The social benefits include "civic branding, national pride, social cohesion and sense of community identity". Winning medals helps to put Hong Kong on the map, but also helps to stimulate "patriotism" towards both Hong Kong and China. In order to stress this aspect of patriotism, the HKSI, for example, organized a trip to Nanjing in July 2005 for elite Hong Kong athletes "to promote cultural, social and political awareness of our athletes towards our motherland" (HKSI website [accessed 14.6.2005]). That same HKSDB study goes on to argue that sport can also be a stabilizing force, in part because it "tends to redirect economic, social and political frustrations into a 'safe' channel" (HKSDB, 2003a). This kind of thinking, with its clear echoes of colonial government thinking in the early 1970s, suggests that some governmental perspectives change little over time.

## The value of sport and its relation to happiness

If we take as an assumption that a healthy, positive and wholesome lifestyle is the goal of individuals in society, then clearly sport should be able to contribute to achieving that goal. The guidelines for the new secondary school curriculum in liberal studies being introduced in Hong Kong argue that “sport is not only a vital element in healthy living, it is also closely relevant to the social, emotional, physical and mental development of a person” (Curriculum Development Council 2005, p. 64). Happiness or well-being are part of that equation.

It has been argued above that sport can contribute positively to the happiness and well-being of individuals in two ways at least. One is that participation can bring health benefits, which in turn enable us to experience life and work more effectively. The other is that watching sports can help to give us good feelings, albeit sometimes rather transient ones. Sport can also contribute to utility too, although, in the Hong Kong case, this seems incompletely understood by companies and only half-heartedly encouraged by the government.

More than thirty years ago one of Hong Kong’s most distinguished sports administrators, A. de O. Sales, commented: “The people of Hong Kong regard spectator sports as a variety of visual amusement. The appreciation of performance seems to be very difficult, if not impossible, to divert into active participation” (Amateur Sports Federation 1972, p. 15–16). He might well feel that not much has changed even today. But, then, even if the government tells us playing sport is good for us, and even if we know deep down that it is good for us, does that mean we have to participate actively in sport? Clearly there is a difference between the fun that players receive from participating and that which the spectators obtain. If the bottom line is that sport should be fun – bringing happiness to us – then does it matter that we are “couch potatoes” with a drink in one hand while cheering on our heroes as long as we are happy? As for myself, a long-standing and no doubt obsessive cricket fan, sitting in a deck-chair on a warm English summer afternoon watching a game of cricket is undoubtedly happiness – but then perhaps cricket fans are more nostalgic and romantic than utilitarian!

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## **Part IV**

# **Implications and Conclusions**

# 12

## Public Policy Implications of Behavioral Economics and Happiness Studies\*

*Yew-Kwang Ng*

### 1 What is behavioral economics

More than 10 years ago, I was in a session of the American Economic Association Annual Meetings. The speaker made some remark to the effect that it is desirable to have a small positive rate of inflation around 2 to 5%. In a growing and changing economy, resources including labor have to be reallocated from shrinking to expanding industries. It is necessary to have the real wage rates in declining industries to decline by a few percents a year to motivate people to transfer to the expanding industries. With a positive rate of inflation, this could be achieved without having to resort to the lowering of the nominal wage rates which is more painful and is resisted more by the relevant workers. A participant commented that this is impossible as the same consumption possibility set is entailed by reducing the real wages by the same  $x\%$  either by lowering the nominal wage rates with no inflation or by keeping the nominal wage rates but with some positive inflation.

That participant/commentator took the simple economic models where the utility of an individual is only the function of the amounts of goods she consumes as the bible. Anything inconsistent with this cannot exist. He did not seem to think of the possibility that, while the simple model may be good in demonstrating some simple principles in economics, it may be too simple for other problems. It may fail to capture some important aspects of the real economy. After his comment, I was going to say that I myself was also more resistant to a decrease in my nominal salary than to a same decrease in real incomes through inflation. And I did not and do not see this as irrational. Failure to have one's incomes increased when the rate of inflation is positive is generally perceived to be less of a failure than failure to prevent one's

nominal salary being cut while inflation is zero. This perception is also quite rational. The fact that the simple economic models do not take account of such preferences only means that it is inadequate for dealing with problems where such preferences are important. On the other hand, it does not mean that all behavioral departures from the simple models are rational. As will be seen below, there are significant elements of imperfect rationality in the actual behavior of economic actors.

The story above prompted me to define behavioral economics as the study (including observation, experimentation, modeling, policy implications) of economic behavior beyond the traditional simple economic models of constrained maximization with purely economic objectives (consumption/profits). Some such “extra” or complex behavioral patterns include:

- Rational but “non-economic” objectives, e.g. fairness, altruism, relative standing, esteem. (See, e.g. Brennan & Pettit 2004; Frank 2004; Rabin 1993.)
- Irrational or non-maximizing behavior, e.g. satisficing, near rational behavior, endowment effects, procrastination, “defective telescopic faculty”, hyperbolic discounting, mob psychology. (See, e.g., Kahneman *et al.* 1991; Loewenstein & Elster 1992; O’Donoghue & Rabin 2001; Simon 1997.)<sup>1</sup>

Day (2004, p. 716) defines behavioral economics thus: “Behavioral economics consists of (i) identifying general characteristics, rules, or principles of economic behavior based on direct observation and inquiry; (ii) constructing models based on these characteristics; (iii) determining the extent to which behavioral models approximate observed behavior; (iv) the use of models to generate scenarios of future behavior that may be influenced by policy instruments or exogenous influences.” This definition is logical. However, it is quite possible for many economists, based on direct observation and inquiry, to identify general characteristics, rules, or principles of economic behavior and construct models that are exactly the same as the traditional simple economic models of constrained maximization. After all, even an economist like me, who largely embraces behavioral economics, may believe that the traditional simple models explain well perhaps no less than 80% of economic behavior. (But it remains important to explore the remaining 10–20% and to improve the explanation of the 80% as well.) But it is very unlikely that such a traditional analysis will be regarded as belonging to behavioral economics.

## 2 On the policy implications of behavioral economics

I view the traditional simple models of economic analysis as very useful but not completely adequate for some problems and hence the study of behavioral economics is a very important supplement. However, I also suspect that some of the findings of behavioral economics have been exaggerated.

For example, consider the well-discussed endowment effects (on which, see Kahneman, Knetsch & Thaler 1991). For the same mug, typically an individual will not pay more than \$4–5 for it if not yet in her possession. Once possessed, she will not be willing to sell it or give it up for as much as \$12 or so. Such a big difference cannot reasonably be explained by the traditional income effect. I do not regard such preferences to be necessarily irrational. A person may need more than a few dollars (in addition to the value of the mug) to induce her to engage in a transaction, especially if that could be seen as reflecting her desperation to obtain some cash. Why does she have to sell something she already possesses? Some extra compensation may be needed. This is not irrational and does not imply that her marginal utility of money curve has a kink, as some behavioral economists infer. It may simply be because the person does not want to incur the costs (inconvenience of transaction, being seen as in financial desperation, etc.) involved. On the other hand, if the same person values an investment bond as worth about \$5k., an offer of \$5.5k. will probably be sufficient to induce her to sell it, especially if she is fairly confident on her valuation. However, this does not mean that the endowment effect or loss aversion does not apply to all decisions involving large sums such as in the housing market. (For the presence of loss aversion in selling houses, see Genesove & Mayer 2001.)

On the other hand, many violations of the axioms of rational choice (the expected utility hypothesis in particular) are due to mistakes of the decision makers. (Others are due to not accounting for such relevant factors as regret, excitement, worry.) I could also be tricked to choose in a way in violation of expected utility maximization. Once discovered, I know that I should have chosen the other way. For such divergences, non-expected utility theories may have some predictive function but do not have normative implications. When we both visited the Department of Economics at National University of Singapore in 2002, Jack Knetsch and I discussed the issue of which types of divergences/violations should be accepted and which ignored for normative evaluation for the society, as reported in Ng (2003a).

We have the following agreement. On the one hand, there are some obvious cases of mistakes which should be ignored. For example, line segments of the same length may be perceived to be longer or shorter depending on whether the extra lines at each end of the line segments are pointing inward or outward. Such visual perception mistakes should clearly be ignored. (But see a remark at the end of this paragraph.) On the other hand, such true preferences like the preference for not having one's nominal salary cut should be accepted, even if they are not allowed in the simple models of economics. But what are true preferences and where should the dividing line be drawn between the two types? We agreed that the ultimate criterion should be whether people's feelings (of being happy or unhappy) are affected. This is consistent with my view that happiness is our ultimate objective and is even more fundamental or ultimate than preferences, actual or informed (Ng 1999, 2000a). However, if we use happiness as the ultimate criterion, different contexts may affect whether certain mistakes or preferences may or may not affect happiness. For example, if I derive happiness from eating chocolate bars, I do not want to pay extra for those bars that only look longer. But if I use those bars to decorate my living room and I enjoy seeing longer looking bars, paying extra for bars that only look longer is appropriate.

Many departures from perfect rationality and perfect information that have significant policy implications have been discussed, some from a long time ago. For example, excessive consumption and inadequate savings for the future were regarded by Pigou (1929, p. 25) as the "*faulty telescopic faculty*", by Ramsey (1928, p. 543) as the "*weakness of imagination*" and by Harrod (1948, p.40) as the "*conquest of reason by passion*". This has an obvious implication for encouraging savings or even forcing contributions to a superannuation scheme (see, e.g. Laibson *et al.* 1998; Thaler & Benartzi 2004). For this and other policy implications of the findings of behavioral economics, see, e.g., Akerlof (2002) and Berg (2003). In the next section, the implication on excessive volatility in business cycles due to mob psychology and the presence of multiple equilibria is discussed.

### **3 Excessive volatility in business cycles**

The problem of excessive volatility has been analyzed from Keynes (1936) to Shiller (1981) and Summers (1986), among others. Here, I want to focus on the excessive volatility due to mob psychology and the existence of multiple equilibria or something close to this.

First, on mob psychology, let me tell a true personal story. About three decades ago, when I had absolutely no experience in share trading or financial economics, I was chatting with some friends. The conversation turned to share trading. Mr. A said, "They use the rule of 10%." Mr. B asked, "What is this rule of 10%." Being young and highly confident of myself, I thought I knew what it meant just from its name. So I said, "The rule of 10% means that, if you evaluate the share of a company at \$100, when the share price drops to \$90 or below, you buy; when it increases to \$110 or above, you sell!" I said it with so much conviction that not only Mr. B nodded his head, Mr. A also nodded his head! Some weeks or months after that conversation, I was very surprised to find out in some publication that the so-called rule of 10% means something almost exactly opposite. It means something like this. When the share prices move down by more than 10%, it means that the bear market has come; quickly sell before it is too late! When the share prices move up by more than 10%, it means that the bull market has come; quickly buy before it is too late! This is what I mean by mob psychology of following the trend. Obviously, such psychology, behavior, and investment rules are going to increase the volatility of fluctuations in the financial markets. Moreover, it may also increase the volatility in some real variables, including production, especially when the economy is in a situation having or a continuum of equilibria or close to that.

### **Non-neutrality of money**

In fact, even without mob psychology, time lags, money illusion, and other frictions, just the presence of non-perfect competition may make the economy having a continuum of equilibria. In such a situation, a change in nominal aggregate demand (either due to a change in money supply or some other factors) may affect either the price level (the monetarist case) or the real output (the Keynesian case) without affecting the other variable. The remarkable cases of an expectation wonderland (outcome depends on expectation which will be self-fulfilling) and cumulative expansion/contraction are also possible, partly explaining some real-world phenomena like business cycles, the importance of confidence, and difficulties of prediction (Ng 1977, 1980, 1986, 1992, 1998; Ng & Wu 2004; on a range of equilibria and the effectiveness of incomes policies, see also McDonald 1990; Lye & McDonald 2004).

In the non-traditional cases, there exists an **interfirm macro-economic externality** where the expansion by each firm benefits other

firms *apart from* the familiar income multiplier effects. This is an area where behavioral economics, macroeconomics and welfare economics intersect, an area still not adequately studied.

### **The crux of the difference**

In the traditional case of perfect competition, the same set of conditions (no time lags, no money illusion or other frictions) makes the economy have a unique equilibrium with the result of the neutrality of money. Why does the presence of non-perfect competition (either monopoly, oligopoly, monopolistic competition or any other non-perfectly competitive market structure or a mixture thereof) make such a big difference? Both the demand and supply sides are involved.

On the demand side, a perfectly competitive firm faces a horizontal demand curve for its product. Such a demand curve cannot shift left or right; it can only shift up or down. But an upward shift (as a consequence of an increase in aggregate demand, including that resulting from an increase in money supply) means an increase in prices. With no time lags, no money illusion (workers demand higher nominal wages with higher prices), etc. this leads to a similar shift in the marginal cost curve of the firm. Thus, the new profit-maximization point of  $MC=MR=price$  remains at the same vertical line. Only prices increase with no change in the output level. In contrast, for the case with non-perfect competition, the demand curve is downward-sloping. It can then either shift proportionately upward following an increase in aggregate demand, leading to an increase in the price, or it can shift proportionately rightward, facilitating an increase in output, making the contrasting monetarist and Keynesian cases possible.

On the supply side, a horizontal demand curve under perfect competition implies that the MC curve has to be upward sloping for a determinate equilibrium. With such an upward-sloping MC curve, an increase in output tends to lead to an increase in the price level. On the other hand, with non-perfect competition, the demand curve for the product of a firm is typically downward sloping, making the corresponding MR curve typically even more downward sloping. It is thus consistent (for the existence of a determinate equilibrium) with either an upward, horizontal, or even downward-sloping MC curve. An increase in output may not increase or may even decrease the marginal cost, making the result of no increase in the price level more likely to prevail.

#### 4 Implications for the optimal level of public spending

In this section, we discuss the implications of some findings of behavioral economics and happiness studies not usually considered in the simple economic models on the optimal level of public spending, especially on public goods.

First, with increasing affluence, the welfare of an individual depends increasingly less on her absolute consumption and more on her relative standing in the society. The importance of relative standing such as relative-income or relative-consumption effects has long been recognized by economists. While most economists refer to Veblen (1899) and Duesenberry (1949), Rae (1834) discussed the problem of relative income extensively much earlier. However, recent studies reveal the magnitude, scope, and relative (to absolute income) importance of relative standing that are beyond the imagination of most people, myself included. For example, one may expect that the importance of relative standing is least in the area of health care where the absolute effects may be expected to dominate. However, Wilkinson (1997) shows that even in health care, relative standing is more important than absolute standards. The relatively poor, even with higher absolute incomes and health care, ended up with much lower level of health than the absolutely poor but relatively well-off. Mortality is more a function of relative than absolute income and health care. After reviewing biological and non-biological evidence, Frank (1999, p. 145) concluded that “concern about relative position is a deep-rooted and ineradicable element of human nature”.

For a single person, an increase in income increases both her absolute and relative incomes. It is thus perceived to be very important. If the friends/schoolmates of your child all receive expensive birthday and Christmas gifts, you also have to give your child expensive ones. If your friends all have luxurious cars, you may feel less satisfied with your standard one. However, since public goods are simultaneously consumed by all individuals, no such relative pressures are present. This causes a bias in favor of private spending or against public spending. The benefits of public spending are underestimated relative to that of private consumption. In most estimates, the marginal benefit of private expenditure is likely to be taken to include the absolute-income or intrinsic consumption effects *plus* the internal or direct relative income effect (as these two taken together constitute the worth of private consumption as it appears to each individual), but not to include the negative external or indirect relative income effects. This

creates an over-emphasis in favor of private expenditure, leading to a sub-optimal level of public spending (Ng 1987).

Secondly, behavioral economics and happiness studies show that individuals are not perfectly rational and perfectly informed maximizers as in the simple economic models. Rather, their behavior is affected by biological instincts, the influence of commercial advertising, peer pressure, imperfect information, and imperfect rationality. Moreover, at least in some aspects, these influences interacted to form a one-sided bias making virtually all individuals (myself included) become excessively materialistically inclined (excessive in the sense of being bad to their own welfare). The (biological) fitness-maximizing instinct of accumulation (food storage in animals and money or wealth accumulation in man) also biases us towards excessive materialism. Natural selection works on the principle of survival and reproductive fitness, not on welfare maximization. It is true that once consciousness evolved (or created by God), evolution (or God) ensured that the choices made on the spot with conscious decisions are largely consistent with fitness by endowing the conscious species with affective feelings. Thus, activities/things bad for fitness (like injuries to the body, sickness, etc.) are penalized with pain and those good for fitness (like eating nutritious food when hungry and having sex with reproductive members of the opposite sex) are rewarded with pleasure. Thus, our conscious decisions largely aiming at welfare maximization are also largely consistent with fitness maximization. However, the correspondence is not 100%. Hard-wired bias in favor of fitness may be selectable even if not consistent with welfare maximization. For example, the excessive fear of death and the willingness to undergo enormous hardships in order to survive will increase our fitness even at the costs of decreasing our expected net welfare. Similarly, excessive accumulation of wealth may increase fitness even if welfare reducing.

Happiness studies by psychologists and sociologists (and now increasingly also by economists) show that, after a rather low figure needed for biological survival, higher incomes contributes little to happiness even at the individual level (less so at the social level due to the need to deduct the relative competition effect). The evidence suggests that income accounts for less than 2% of the overall variance in individual happiness (Diener *et al.* 1993).<sup>2</sup> Moreover, the direction of causation need not just be from money to happiness. In fact, "if there is any causal relationship in rich countries, it appears to run from happiness to growth, not *vice versa*" (Kenny 1999, p. 19; see also Graham *et al.* 2004). On the other hand, studies show that there are far more

important factors (including faith, family, health, employment) affecting happiness. If money is not very important for happiness but many people still sacrifice things far more important for happiness like health and leisure, jeopardize their relationships with friends and family, and even violate moral principles and the law (thus threatening their own freedom and even lives) to make more money, are they not less than perfectly rational? Such excessive accumulation decreases welfare but may increase fitness, especially in the ancient past when our accumulation instinct was shaped. This is so since an unloved and unhappy rich man with no true friends might still possess many wives and rear many children to reproductive ages. The case for the existence of irrational materialistic bias influenced by both nature and nurture is overwhelming, as discussed in Ng (2003b).

Economists tend to trust actual choices backed up by spending but doubt the reliability of happiness studies, which rely heavily on self assessments of happiness levels that are also difficult to compare interpersonally.<sup>3</sup> Dominitz and Manski (1999) examine the scientific basis underlying economists' hostility against subjective data and found it to be "meager" and "unfounded". Rather, "survey respondents do provide coherent, useful information when queried systematically"; see Manski 2000, p. 132. Even before the use of more reliable methods of happiness measurement, there are persuasive arguments that existing measures are rather reliable. For example, different measures of happiness correlate well with one another (Fordyce 1988), with recalls of positive versus negative life events (Seidlitz, Wyer & Diener 1997), with reports of friends and family members (Costa & McCrae 1988; Diener 1984; Sandvik, Diener & Seidlitz 1993), with physical measures like heart rate and blood pressure measures (Shedler, Mayman & Manis 1993), and with EEG measures of prefrontal brain activity (Sutton & Davidson 1997). Moreover, correlations of happiness show remarkably consistency across countries, including developing and transitional (Graham & Pettinato 2001, 2002; Namazie & Sanfey 2001). Despite some remaining problems (see, e.g. Schwarz & Strack 1999; Bertrand & Mullainathan 2001), reported subjective well-being may still be used as good approximation (Frey & Stutzer 2002).

For those economists who are still skeptical or who even look down upon and deride at the happiness measures, they should look at their own backyard. Even the measurement of the most important economic variable of GNP is subject to all sorts of inaccuracies. We used the imperfect measure for decades. Then came the PPP (purchasing power parity) adjustment which overnight increased the Chinese GNP

by 4 times and the Indian one by 6 times from this single adjustment alone! Most happiness measures may not be very accurate but I doubt that a 4-time adjustment will ever be necessary for the average figure of any nation. Furthermore, the picture is not much different even if we use more objective indicators of the quality of life. Analyzing a panel data set of 95 quality-of-life indicators (covering education, health, transport, inequality, pollution, democracy, political stability) covering 1960–90, Easterly (1999) reaches some remarkable results.

While virtually all of these indicators show quality of life across nations to be positively associated with per capita income, when country effects are removed using either fixed effects or an estimator in first differences, the effects of economic growth on the quality of life are uneven and often nonexistent. It is found that *“quality of life is about equally likely to improve or worsen with rising income. ... In the sample of 69 indicators available for the First Differences indicator, 62 percent of the indicators had time shifts improve the indicator more than growth did”* (Easterly 1999, p. 17–18). Even for the only 20 out of the 81 indicators with a significantly positive relationship with income under fixed effects, time improved ten out of these 20 indicators more than income did. The importance of time is explained by the advance of knowledge at the world level that does contribute to the quality of life and happiness.

The above has an important implication. The growth in the government sector, the inefficiency in government spending, and the excess burden of taxation have been much emphasized by economists. However, they tend to ignore the likely much grosser inefficiencies in private spending due to the mutually offsetting effects of relative competition, the environmental disruption effects of much production and consumption activities, and the materialistic bias due to both nature and nurture discussed above. Taking account of these inefficiencies, the diversion of spending from the private to the public sectors may well be more welfare enhancing. It is true that the cost of an additional million dollars of public spending may be rather high (but see an additional point below questioning this). But this is so only in dollar terms. If additional private spending no longer really contributes significantly either to the quality of life or the happiness of people, the social welfare costs (not in the sense of efficiency costs but in the sense of the costs in terms of happiness forgone at the social level) of public spending may be rather low, or even negative. (The latter will be the case when private consumption is welfare-reducing through the environmental disruption effects. In fact, economic growth may be welfare reducing if disruption is not or could not be directly taxed/controlled

at low costs, even if the government is benevolent enough in trying to tax private incomes and spend on disruption abatement optimally, as shown in Ng 2003b.) Since things like money and consumption are not our ultimate objective while happiness is, the high monetary costs of public spending should not deter us from increasing public spending on areas that are welfare enhancing (such as education, health and research) if the happiness costs are low. Economists need to complement their traditional learning with this opposite and more important piece of knowledge.

In fact, even just purely within the confines of monetary costs, there is a consideration suggesting that economists overestimate the costs of spending on public goods. Kaplow argues that public goods can be financed without excess burdens or additional distortions by using an adjustment to the income tax that offsets the benefits of the public good. The “pre-existing income tax schedule is adjusted so that, at each income level, the tax change just offsets the benefits from the public good. By construction, an individual’s *net* reward from any level of work effort will be unaltered; any reduction in disposable income due to the tax adjustment is balanced by the benefits from the public good. Because an individuals’ after-tax utility as a function of his work effort will thus be unchanged, his choice of work effort – and utility level – will also be unaffected” (Kaplow 1996, p. 514).

Many economists may still fail to see the point, thinking that, even if a taxpayer gets to enjoy the public good, a higher tax rate will still induce higher disincentive effects as the taxpayer can free ride on the higher level of public goods. To the extent that the benefits from public spending is related to the publicly unobservable earning abilities rather than actual incomes, this is in fact true and serves as a qualification to Kaplow’s point discussed in Ng (2000b). However, Kaplow refers to the higher benefits from the public goods due to higher income or wealth level (e.g. police protection of more properties). As such benefits cannot be enjoyed if the higher incomes are not actually earned, free-riding is not possible.

We may also view the point roughly as the excess burden on the taxation side being offset by the negative excess burden on the spending side. If you can keep all the additional \$100 earned, the incentive will presumably be higher than the case when you can only keep \$70, with \$30 taxed. But this is an accurate picture only if the tax revenue is thrown/wasted away. If it is used to supply public goods such as police protection, people may actually have higher incentives to earn the protected \$70 than the unprotected \$100!

## 5 Conclusion

In conclusion, the following main points may be reiterated:

- Economic behavior is influenced by many factors beyond those (consumption, profits) considered in simple economic models, including fairness, relative competition, and even irrational preferences.
- Mob psychology and the existence of multiple equilibria may cause excessive volatility in business cycles (including non-neutrality of money) not recognized in the traditional economic analysis.
- Economists generally emphasize the inefficiencies of public spending and the excess burden of raising public revenue, ignoring the grosser inefficiencies of private spending arising from the following sources.
- Environmental disruption in both the production and consumption processes.
- Relative competition between individuals that is mutually offsetting at the social level.
- Excessive materialism due to our accumulation instinct and the omnipresent commercial advertising.
- The above provocative claims are supported by research results of behavioral economics, happiness studies, and a broader analysis of factors affecting welfare.

Thus, a shift of resources towards public spending in the appropriate areas, especially those with less environmental disruption, with significant external benefits or possessing the nature of global and long-term public goods (including environmental protection, research, education and health) may be much more welfare enhancing despite some inevitable inefficiencies in public spending and the excess burden of raising tax revenues (the later being likely to be offset by the negative excess burden on the spending side).

### Notes

- \* This chapter is expanded from Ng (2005). This was undertaken during my visit to the Dept. of Economics, National University of Singapore as a Goh Keng Swee Professor in the second half of 2005.
- 1 I define irrationality as preferring/choosing something against one's own welfare neither due to ignorance nor for the welfare of others; see Ng 1999 for details.
  - 2 See Hagerty & Veenhoven (2003) on the existence of some positive correlation between incomes and happiness.

- 3 For one thing, people now may require a larger amount of subjective happiness before describing themselves as “very happy”. Thus, despite a possibly substantial increase in happiness, the percentage of people describing themselves as “very happy” may not have increased. To overcome such difficulties, I have developed a method that yields happiness measures that are comparable interpersonally, inter-temporally, and internationally (Ng 1996).

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