

## **Happiness as a New Paradigm for Development and Public Policies**

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### **Abstract**

If happiness is the ultimate goal of human beings, the development paradigm needs to be rethought. Development should not only be about economic prosperity - a material means of happiness, but should be conceptualized towards the goal of happiness that involves other aspects than economic such as physical, mental, social and spiritual. Public policy schemes, therefore, need to be redesigned to increase individual and societal happiness. This was the rationale for Public Policy Development Office (PPDO) to organize the International Conference on “Happiness and Public Policy”, aiming to facilitate the exchange of multi-disciplinary insights, and debates on the development paradigm, research methodologies, and findings from various countries to enrich and enhance the quality of public policy development.

**Keywords:** Happiness, Public Policies, Development

## Introduction

This paper is a summary of the synthesis report from the two-day International Conference on “Happiness and Public Policy” held at the United Nation Conference Center (UNCC) in Bangkok during July 18-19, 2007. The conference consisted of five themes: happiness in global perspectives: why we need a new paradigm, conceptualization of happiness and indicators, local interpretation on national happiness, happiness and socio-economic policy, and technology and happiness. Based on the synthesis, this summary discusses the topic in the following outline: 1) why we need a new paradigm, 2) why we want to measure happiness, 3) how we measure happiness, 4) implications to public policies and 5) the way forward.

### 1. Why We Need a New Paradigm

*“Human society is not a market place where people compete for profit on goods and services...man is less an economic animal and more a social being whose sense of well being comes less from material gain and more from mental growth and spiritual nourishment.”*

*Remarks by Bhutan’s Minister Lyonpo Jigmi Y. Thinley<sup>2</sup>  
at the Conference, July 2007*

One of the main messages from the Conference seems to be that development should be subjected to improving people’s subjective well-being in an environment of peace. Individual and society can no longer be defined only by market forces. Instead, the achievement of happiness requires more than economic means and has to incorporate improvements in the mental, spiritual, social, environmental realms.

For over half a century, a success of a nation has been determined by its ability to grow. Gross domestic product (GDP), both per capita and growth, has come to represent the well-being of a nation. While

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<sup>2</sup> He has been Bhutan’s Prime Minister, since the country’s first election in March 2008.

countries have become wealthier, increasing social inequalities persist both within and between countries. Environmental deterioration continues to produce long-term damages that have substantial effects on humans. People do not become happier with their life over time due to the increase of negative events, e.g. social problems, crime rates and violence, psychological problems and diseases, as well as the depletion of natural resources, which have resulted from a narrow focus of development framework.

Because development was simply to pursue economic prosperity, its main focus was to employ conventional economic strategies, e.g. industrialization, modernization, and market coordination; this approach to development became known as the conventional approach and attempts to provide national well-being through economic prosperity. However, it has been criticized for being too resource-intensive in industrial production and consumption, widening income disparity, while neglecting qualitative aspects of development such as happiness and overall quality of life. Imbalanced development has resulted in negative events associated with deteriorating social and environmental wealth which leads to the stagnation of social happiness.

Puntasen (2007) provided an important analysis of the role conventional economics had in limiting the scope and definition of national well-being. In his analysis, Puntasen pointed to the conventional economics principle of utility as the primary factor for the limited scope and definition of national well-being. “Utility” as used in western economics was used to represent happiness, instead of finding core values of happiness.

The core values that have contributed to the development of conventional utility theory are the ideals that “1) following self-interest is considered to be rational behavior for an individual, and 2) only competition can lead to economic progress (more and efficient production leads to lower cost for a consumer)”. By linking the two core values together, one can infer how conventional economics has made economic prosperity synonymous with national well-being. If a rational behavior of an individual is self-interest, then a competitive

market is essential for this individual. And, if competition can lead to economic progress, then it is essential for the development paradigm to promote competition to ensure economic progress. In turn, the development paradigm views individuals and society as rational and only wanting to compete in the market economy to achieve economic progress and ultimately ‘national well-being’. The idea that more consumption would lead to greater happiness undermines the other values and subjective nature of the individual and society. By restricting human choices to the framework of an objective process, the development paradigm essentially ignore the importance of society and human nature in the development process.

Puntasen also compared conventional and Buddhist economics concepts under a system of capitalism with industrialization and consumerism. Under mainstream approach one can visualizes growth without an end, which in reality can lead to unsustainable, environmental degradation and human self-destruction. On the other hand, the Buddhist economics suggests an alternative path to happiness with *sukkha* or wellness being generated not through increased consumption but rather through mental development. Following Buddhist economics approach, the development does not require excessive material inputs or resources used; thus, it is a promising alternative development paradigm. “Non-self” instead of “self-interest” is the core value in Buddhist economics leading to compassion and cooperation rather than competition.

Based on Buddhism, the development process in the mind requires the condition of a cleanliness or purity of the mind generated by *sila*, a calm mind generated by *saṃdhi*, and a clear mind generated by *pañña*<sup>3</sup> as the highest level of development of the mind. A person who has *pañña* will understand clearly how peace and tranquility or *sukkha* is opposite to pain or *dukkha*, while one with ignorance (lack of *pañña*) usually suffers from changes and attachment to oneself. In order to

<sup>3</sup> According to Prayukong (2007), under Buddha Dhamma the process of developing *pañña* is not in general education but in the Threefold Training which is the way leading to the cessation of suffering (*dukkha*) or the Eightfold Path.

completely avoid *dukkha* (suffering), which results from the un-realization of natural changes, namely, birth, aging, illness, and death, the understanding of “non-self” is crucial. This requires *pañña*, the ability to understand everything in its own nature. Mindfulness is instrumental to reach *sukkha*.

Emerging from Buddhist philosophy, the Sufficiency Economy concept - initiated by His Majesty the King Bhumiphol Adulayadej of Thailand - advocates a shift in development aims and policies from focusing on competition and consumption to focusing on self-contentedness, moderation, and sustainability against the backdrop of globalization. As summarized by Warr (2007), the Sufficiency Economy concept can be summarized into five important themes. First, (moderate) material aspirations should be sensible. Development of a nation should be founded on an assurance that the majority of people have their basic necessities to live on and live for. Second, excessive risks should be avoided, and safety nets should be created. Third, people should be self-reliant. Although sufficiency means to lead a life without excess or overindulgence in luxury, extravagance may be permissible if it is within the means of the individual<sup>4</sup>. Fourth, one should emphasize “appropriate conduct and way of life while incorporating moderation, due consideration in all modes of conduct, and the need for sufficient protection from internal and external shocks”<sup>5</sup>. Finally, one should be concerned with non-material aspects of life that enrich personal development, with a special focus on accumulation of knowledge.

As noted by Warr, these five themes fit well with the Buddhist principles of avoiding greed, hatred, and ignorance, which can be cured by compassion, wisdom, and recognition of suffering. Moreover, they fit well with what economists have recently come to realize: diminishing marginal effect of income on subjective well-being – once GDP per capita reaches approximately the \$20,000 level, there is little gain in measures of subjective well-being. If one is to maximize

<sup>4</sup> His Majesty the King’s speech, 1998.

<sup>5</sup> His Majesty the King’s speech, 21 November 1999.

his or her happiness, then sufficiency economy based on life without excessive consumption and self-reliance makes sense.

Along with Buddhist and Sufficiency Economy concept, another concept that points out the shortcomings of the conventional approach with respect to the environment is the Green Growth concept.<sup>6</sup> The Green Growth concept specifically proposes a change of attitude and behavior towards consumption and production for sustainable development.

Having ignored the complexities of human mind and the relation of human life and nature, the conventional paradigm has led to a misrepresentation of development and national progress as almost solely focusing on economic growth. This critique has motivated many researchers to shift their interests to subjective well-being, which takes into account the complexities of human mind and human behavior as a social-being.

## **2. Why We Want to Measure Happiness**

Critics of the conventional development paradigm place significant importance on the inclusion of subjective elements of human behavior as a major player in conceptualizing development. Therefore, measures of development and progress should go beyond objective income-based measures.

Realizing the need to shift the way development is perceived, several international organizations, nations, NGOs, and academics have begun to put the new approach into practice. Represented in this conference are, for example, the Organization for Economic Cooperation and Development (OECD), the United Nations Economic and Social Commission for Asia and the Pacific (UNESCAP), the United Nations Educational Scientific and Cultural Organization (UNESCO), the Government of Bhutan, the Government of Thailand, and the Wellbeing in Developing Countries Research Group (WeD).

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<sup>6</sup> Chung, Nikolova and Olsen (2007).

Currently, these actors are focusing on the collection of knowledge and measurement of society's subjective well-being, happiness, quality of life, sustainability, or progress in light of economic prosperity. Research studies and policy initiatives range in a variety of combinations concerning the location and level of assessment, the partners involved, the methodologies employed, and the impact on public policy. Collectively, work is being done at the sub-national, national, and international levels, undertaken by the public and private sectors, civil society, as well as, academia and the media, sometimes in collaboration, both in developed and in developing countries. While some of these measures are based on solid statistical evidence, others just on weak data or methodologies.<sup>7</sup>

For example, the Wellbeing in Developing Countries Research Group (WeD) examines the influences of social and cultural constructs on the perception of well-being, and particularly focuses on the construction of a conceptual and methodological framework of well-being, which is defined as "a positive state of being with others in society, where needs are met, where one can act effectively and meaningfully to pursue one's goals, and where one is able to experience happiness and feel satisfied with one's life" (McGregor, 2007). The Theory of Human Need (Doyal and Gough, 1991), which is one of the basis of the WeD project, maintains that human well-being can be assessed from two universal characteristics: physical health and autonomy, and the assessment is based on reported satisfaction of a set of eleven intermediate needs: adequate nutritional food and water, adequate protective housing, non-hazardous work and physical environments, appropriate healthcare, security in childhood, significant primary relationships, physical and economic security, safe birth control and childbearing, and appropriate basic and cross-cultural education.

At the national level, the governments of Bhutan and Thailand have been conceptualizing how to measure progress with respect to new

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<sup>7</sup> Matthews (2007).

direction development approach which sets happy society as a goal. Bhutan's Gross National Happiness (GNH) is composed of nine elements, including, psychological wellbeing, health, time use and balance, education, cultural diversity and resilience, good governance, community vitality, ecological diversity and resilience, and living standards. Similarly, Thailand's National Economic and Social Development Board (NESDB) has recently introduced Green and Happiness Index (GHI) composed of six components; namely, well-being of person, contented family, economic strength and justice, community strength, good environment and ecological quality, and good governance under a democratic society.

The OECD has launched the Global Project on Measuring the Progress of Societies. This project allows organizations throughout the World to share their own progress indicators, whilst fostering the global conversation on what progress is to a society. The Project has also made an impact on the international level with the Istanbul Declaration in 2007. This document focuses on the encouragement and commitment of the OECD to support countries in measuring multifaceted societal progress through statistical indicators and has been signed by hundreds of global leaders.

The UN has also adopted developmental goals that appear more in touch with human well-being and quality of life. For example, UNDP's Human Development Index (HDI) measures countries' human development by considering three components: income, education attainment, and life-expectancy at birth. The UN's Millennium Development Goals (MDG) include poverty and hunger eradication, provision of primary education, promotion of gender equality, reduction of child mortality, improvement of maternal health, combat against HIV and other diseases, assurance of environmental sustainability, and improvement of living conditions and sanitation of water.

The UNESCAP has advocated for the use of green growth concept and policies for countries in the region by indicating the need to develop ecological efficiency index (EEI) to internalize the cost of extraction

and processing as well as the ecological costs of usage of natural resources in the prices of goods. As noted in Chung *et al.* (2007): “to measure only economic growth neglects the qualitative indicators such as happiness and well-beings.” The conventional development paradigm might have focused too much on economic growth, conspicuous consumption, and industrial production that may be too resource-intensive and therefore unsustainable in the long-run and. After having been ignored under the conventional development approach, steps must be taken to maintain and improve good human-nature relationship.

The European Union (EU) has developed a concept of “Social Quality”, which is defined as “the extent to which people are able to participate in social, economic, and cultural life and development of their communities under conditions which enhance their well-being and individual potential.”<sup>8</sup> To achieve social quality, a society must be supportive to its members (social empowerment), institutions must be accessible (social inclusion), people have access to material, environmental, and other necessary resources (socio-economic security), and the society should be characterized by social cohesion. Ogawa (2007) indicates that these social characters are necessary for people to enjoy long, healthy, and creative lives.

Many indices discussed at the conference, such as social quality index and human development index, gross national happiness, green and happiness index, ecological efficiency index, have been proposed to capture the human and environmental elements. Together, these indices attempt to measure people’s capability of living their lives and their corresponding satisfaction.

However, objective social or human development indicators may not be correlated with subjective well-being. Kusago (2007b), ranking several development indicators among Japanese cities, demonstrates that not only GDP but also HDI is not correlated with life satisfaction. Cities which are in the top ranks of GDP and HDI (for

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<sup>8</sup> Ogawa (2007).

example, Tokyo) are not ranked in the top when life satisfaction is considered. This may reflect that economic and objective human and social development indicators are not necessarily consistent with life satisfaction or happiness. Worse is the fact that while GDP growth has increased from 1978 to 2002, life satisfaction has decreased during the same period. These evidences confirm that objective and subjective well-being are not correlated, and emphasizes the need to consider subjective measures of well-being such as happiness and life satisfaction. As stated by Thinley (2007),

*“If we agree that happiness is the single most important value that all of us yearn for, then it should obviously be the purpose of development. The most important indicator for development efforts must, therefore, be the extent to which happiness of individuals and groups increases over time”.*

However, Kusago (2007b) is not the first to find a disconnection between objective and subjective measures of well-being. The previously two studies that epitomized the research on the correlation between wealth and happiness belong to Richard Easterlin in 1974 and Angus Campbell in 1976. Easterlin's findings question the traditional principle that economic prosperity provides happiness to a society or individual as happiness remain stagnant despite economic growth; ultimately these findings became known as the 'Easterlin paradox'. The paradox can be explained by psychological processes people go through, such as adaptation, aspirations, social comparison, when they make judgments about their incomes.

As with adaptation, the concept is clear when one considers consumer goods. Happiness rises when people experience the novelty of new goods, but once the novelty wears off and is replaced by boredom, happiness comes back down. Therefore, to keep happiness high, more and more materials must be introduced for more intense pleasures, as suggested by Scitovsky (1976), people should engage themselves in activities that produce long-lasting pleasures. Caught in

this cycle, people would need to keep searching for more materials or more meaningful experiences, without necessarily gaining more happiness. As people adapt to their life circumstances, they form new aspirations. For a college graduate, a monthly salary of 15,000 baht seems satisfying while a salary of 50,000 baht seems like a lot of money. But as soon as he achieves the 50,000 baht level, he craves a 100,000 baht salary while the 50,000 baht no longer satisfies him. Similarly, a promotion of position only produces expectations and aspirations for further promotions. Therefore, greater opportunities do not necessarily bring about greater happiness because these greater opportunities may generate greater aspirations and unending wants.

Not only does one's own aspiration have an impact on one's feeling of well-being, but so does comparison of oneself with other people. Many studies have shown that social comparison is important in determining one's feeling of well-being, and these studies have all pointed to the same conclusion. Those who live or are associated with higher-earners need more money to feel good or adequate; and the higher is the income of one's comparison group, the less satisfied one tends to be.

Further investigating the role of subjective factors in human behavior, Angus Campbell (*et al.* 1976 and 1981) proposed a framework in which objective conditions were replaced by reports on the satisfaction people expressed with their life conditions. In a brief analysis of Campbell's framework, Easterlin and Sawangfa (2007) noted:

*"In this framework, global happiness or overall satisfaction with life is seen as the net outcome of reported satisfaction with major domains of life such as financial situation, family life, and so on. Satisfaction in each domain is, in turn, viewed as reflecting the extent to which objective outcomes in that domain match the respondent's goals or needs in that area, and satisfaction may vary with changes in goals, objective conditions, or both. ... An advantage of this approach is that judgments on domain satisfaction*

*reflect both subjective factors of the type emphasized in psychology and objective circumstances stressed by economics. ... Another advantage of Campbell's domain approach is that it classifies into a tractable set of life domains the everyday specific circumstances to which people refer when asked about the factors affecting their happiness."*

Not only do self-reported well-being capture the psychological processes, but they also capture life domains that are important to those who report their happiness or satisfaction level themselves. Many nonmarketable factors are known to affect human well-being, for example, friendship, leisure, housing conditions, and neighborhood. The four domains people consistently report being most concerned with are living standards and finance, family life, health, and work. As such, the use of these self-reported measures of well-being is a break from conventional principle of utility, which largely relies on observations of people's material wealth and consumption rather than what people say about their lives.

Therefore, to account for these psychological processes of adaptation and comparison in measuring well-being and to expand the measure of well-being to other life domains than income and consumption, researchers turn to self-reported happiness and life satisfaction, which incorporate "people's multidimensional evaluation of their lives, including cognitive judgments of life satisfaction and affective evaluations of moods and emotions" (Eid and Diener, 2004). As put by Guillen-Royo *et al.* (2007), "objective circumstances are not by themselves determining people's well-being if the individual concerned does not recognize them as contributors or relevant factors" to his or her happiness. Subjective well-being, on the other hand, realizes "the gap between people's goals and perceived resources, in the context of their environment, culture, values, and experiences" (McGregor, 2007). Although the need for subjective measures of well-being has been realized, the challenging task of creating these measures that can be practically put to use remains for many development organizations and policy makers. The next section explains

how happiness or life satisfaction is measured in practice.

### **3. How to Measure Happiness**

Happiness researchers have conceptualized and found new approaches to measure and explain individual happiness using self-reported survey. There is a wide acceptance of using subjective well-being measure as a direct proxy for utility. A document written by Diener (2006) and signed by many prominent scholars in the field of subjective well-being advocates such use of subjective well-being data, in addition to traditional objective measures of well-being, and provides a guideline for how these measures can be constructed.

One of the most common methods to measure happiness and other subjective well-being measures at the individual level is through surveys, which may include single-item or multiple-item questions on how one view one's state of well-being. An example of a single-item question comes from the standard happiness question in the World Values Survey, which asks people, "Taken all together, how happy would you say you are: very happy, quite happy, not very happy, not at all happy?" Each response then scores one to four points so that one has a numerical scale, running from the lowest well-being level (1 = Not at all happy) to the highest well-being level (4 = Very happy). This is very similar to the three-point scale of one of the General Social Surveys of the United States, which asks, "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?"

Another commonly used method is the single-item life satisfaction scale, "which is intended to represent a broad, reflective appraisal an individual makes of his or her life" (Diener, 2006). The standard life satisfaction question, which can be found in the Eurobarometer Survey, asks individuals, "On the whole are you very satisfied, fairly satisfied, not very satisfied, or not satisfied with the life you lead?" The satisfaction question can also be asked with regards to each of the various life domains to get a sense of how much people like each aspect of their lives, how close it is to their ideals, and how much they

would like to change each of the aspects (Diener, 2006). One may ask, for example, “Overall, how satisfied are you with your job?” Domains for which the satisfaction question are often asked include, but are not limited to, job, health, financial situation, family life, leisure, housing conditions, neighbourhood, political situation, and democracy.

In view of the Theory of Human Need, well-being is assessed based on the level of satisfaction with each of the basic and intermediate needs. First, respondents rate the perceived necessity of various components of well-being (for example, 0 = unnecessary to 2 = very necessary). Then, they rate satisfaction with each of these components. Scores for satisfaction are weighted by scores of necessity to take into account differences between individual perceptions of necessities or goals. Although a global measure of well-being can provide a big picture of individual and social well-being, these domain-specific measures can be particularly useful for policy-makers in their assessments of well-being, needs, and concerns of the citizens. It is, therefore, desirable to assess multi-facets of well-being, including moods and emotions, perceived states of mental and physical health, and satisfaction with various experiences, activities and domains (Diener, 2006).

While single-item scales enjoy the benefit of brevity, they may be less reliable and less valid when compared to multi-item scales. This is because random measurement errors tend to be smaller on average in multi-item scales than single-item scales. One of the most widely used multiple-item index is the “Satisfaction with Life Scale” (Diener, Emmons, Larsen, and Griffin, 1985), which is designed to measure global life satisfaction through five items that judge satisfaction with life in general. Five questions are asked with answers ranging in 1-7 scale from “strongly agree” to “strongly disagree”: (1) “In most ways are life close to ideal”; (2) “The conditions of my life are excellent”; (3) “I am satisfied with my life”; (4) “So far I have gotten important the important things I want in life”; and (5) “If I could live my life over, I would change almost nothing.”

Among multi-item scales, one of the most prominent measures of an individual's subjective well-being is net affect. According to Diener (2006), positive affect denotes pleasant moods and emotions that reflect a person's reactions to events that "signify to the person that life is proceeding in a desirable way"; negative affect, on the other hand, represents negative reactions people express towards their experiences. One of the best known surveys that measures subjective well-being with net affect is the General Health Questionnaire (GHQ) in the British Household Panel Survey. The GHQ assesses positive and negative affect according to the responses to the following twelve questions: "Have you recently,

- a) been able to concentrate on whatever you're doing,
- b) felt that you were playing a useful part in things,
- c) felt capable of making decisions about things,
- d) been able to enjoy your normal day-to-day activities,
- e) been able to face up to problems,
- f) been feeling reasonably happy, all things considered, for positive affect, and
- g) lost much sleep over worry,
- h) felt constantly under strain,
- i) felt you could not overcome your difficulties,
- j) been feeling unhappy or depressed,
- k) been losing confidence in yourself,
- l) been thinking of yourself as a worthless person?",

for negative affect.

The optional responses for the GHQ-12 questions are rated on a four-point Likert scale, with possible answers ranging from "1 = More so than usual" to "4 = Much less than usual" for positive affect and from "1 = Not at all" to "4 = Much more than usual" for negative affect. The unweighted scores are then summed up to form a single net affect index, with higher scores indicating lower psychological well-being.

Issues have been raised by Robert Cummins on the terminology of these survey questions and scale of the responses. With respect to the terminology, happiness and satisfaction could mean different things to different people or different cultures. On one hand, this difference in interpretation is precisely what we would like to measure with subjective well-being; we would like to measure how each person really feels about his or her life. On the other hand, the lack of cross-cultural translation makes it difficult to compare happiness or satisfaction of people in one country or one culture to another. Another difficulty concerns cross-cultural response bias. As documented by Cummins (2007), it has been shown that “people from East and Southeast Asian cultures [due to social custom of modesty] are more reticent to rate themselves at the end of the response scale, compared to people from countries like Australia [and the United States].” Therefore, caution should be exercised when comparison of happiness is to be made across countries or cultures. Appropriate research designs and econometric methods would help mitigate this bias in interpretation.

It is apparent from examples of happiness or satisfaction questions given above that the use of scales are different from one survey to another. Not only does it make comparison between surveys impossible, but an issue has also been raised on whether there is an optimal response scale. Cummins (2007) argues that a five-point scale is too blunt. Since people can make more than five points of discrimination in response levels, a scale more refined than five points will allow more sensitivity and variation in survey responses. At the other extreme, however, too expansive a scale might not be feasible, because there would not be enough adjectives to define each point. Moreover, it is believed that a scale should have a midpoint for people to anchor their responses on, implying that the scale should have an odd number of points, such as a seven-point or an eleven-point scale. Cummins himself favours the latter.

Besides the issues of terminology and scales, one issue in the psychology literature has been whether a well-being measure is

reliable and valid. Reliability is judged on whether responses fluctuate over a short period of time, depending transitory and volatile emotional states. The validity of a measure is judged on whether the response reflects what it is meant to reflect. A measure is not valid if the respondents overstate or understate their answers due to, for example, concerns for social desirability.

A first argument in defence of using happiness data comes from evidence that it has often been shown to correlate substantially with other subjective data. These include, for instance, how self-rated happiness can be shown to be correlated well with assessments of the person's happiness by friends and family (Diener, 1984; Pavot and Diener, 1993; Sandvik *et al.*, 1993), reports by spouses (Costa and McCrae, 1988), reports from clinical experts (Goldings, 1954), and with memory measures, in which people must remember good versus bad events from their lives (Balatsky and Diener, 1993). Based on an experiment, van Praag (1991) has shown that a verbal label sequence, such as 'very bad', 'bad', 'good', 'very good', is similarly understood and translated into a numerical scale by different respondents.

A second argument is based on findings within the psychology literature of a well-defined correlation between happiness data and various physical measures. For example, reported subjective well-being has been shown to be positively associated with the duration of genuine or the so-called "Duchenne" smile (Eckman *et al.*, 1990), and measures of responses to stress such as heart rate and blood pressure (Shedler *et al.*, 1993). Subjective well-being measures have also been used to predict the length of the person's life (Palmore, 1969; Mroczek and Spiro, 2006) as well as the risk of getting a coronary heart disease (Sales & House, 1971), strokes (Huppert, 2006), and suicide (Koivumaa-Honkanen *et al.*, 2001). Left-right brain asymmetry is associated with higher levels of positive affect, hormones relating to stress, and hormones relating to neuroticism (see Urry *et al.*, 2004; Davidson, 2004; and Nettle, 2005). Other studies (Robinson and Shaver, 1969; Headey and Wearing, 1991) have shown that reported happiness

is quite stable and reasonably sensitive to changing life circumstances (Frey and Stutzer, 2002a).

As is true with any other measures, subjective well-being is subject to measurement errors and biases. Statistical techniques must be applied to correct for such flaws before one makes definite policy decisions based on these measures. Policy-makers should be made aware of flaws that cannot be properly corrected, in which case policies should be designed with due caution. Despite its potential limitations, subjective well-being data has been shown to be of some significant validity and a good proxy for the individual's utility. Further, the structure of happiness regression equations -- regressions with a measure of subjective well-being as the dependent variable -- has been shown to have a consistent pattern in the United States, Europe, and many other countries around the world.

To set subjective well-being as a development goal, one needs to know whether and, if so, how subjective well-being measures, such as happiness, respond to a policy intervention, and a change in objective circumstances. A first requirement for subjective well-being indicators to effectively be used as a policy goal is for them to be sensitive to a policy intervention (Diener, 2006). Moreover, to study changes, longitudinal data or time-sampling and diary-recording of experiences of the targeted population are needed. Varying frequencies of data collection can lend information on short-term, medium-term, and long-term changes in and effects of a given policy intervention on subjective well-being.

#### **4. Implications for Public Policy**

Recently, measures of subjective well-being have gained prominence in the development study. Information on how people feel about their lives is also useful for policy makers. If it is found that an increasing number of people are not satisfied with their lives or unhappy, it is an important alarm that policy makers should not ignore. As such, there is a need to understand determinants of happiness, possible impacts of policy choices over one's happiness, and how to

utilize subjective happiness data into policy-making to improve people's well-beings.

Many researchers have conducted empirical studies to examine relationship of happiness and various influential factors. Many papers at the conference provide various results and policy implications; however, highlights of main issues to guide public policies are categorized as follows:

### **Basic Needs, Wealth and Asset**

- Basic needs matter in determining happiness of Thai people independently of the ownership of material wealth, as low basic needs satisfaction is negatively correlated with happiness. Material wealth is found to be strongly correlated with happiness (Guillen-Royo *et al.*, 2007). In view of homeostasis, presented by Cummins (2007), money and wealth, acting as buffers for people experiencing negative events, can bring them back to their normal level of happiness. One reason for this may be that wealthy people are better equipped with resources to fend for themselves when faced with negative events and to improve their standings. For example, when people are faced with negative economic shocks, access to savings and wealth allows people to smooth out their consumption.
- While assets and wealth seem to boost people's happiness, debt has the opposite effect. Gray and Kramanon (2007) found that people who are without debt or indebted but not feeling burdened by it tend to be happier than those who are indebted and feel burdened. Still, people who are without debt or indebted but not feeling burdened by it tend to be happier than those who are indebted and feel burdened.
- Home-ownership is positively correlated with happiness. Home-owners are found to be happier in Japan (Kusago, 2007b). Powdthavee (2007b) finds the positive association between home-ownership and life satisfaction among the British, while Gray and Kramanon (2007) found that home-owners tend to be happier both in Chainat and Kanchanaburi of Thailand.

## **Relative Income, Relative Poverty, and Role of Social Comparison**

- Longitudinal and cross-country studies have shown that happiness rises with per capita national income up to a certain level of income. Sarracino (2007) found in a cross-country study that income is strongly positively correlated with happiness, with those belonging to the lower income quintiles being less happy and those in the higher quintiles happier. Similarly, those who place themselves in the upper social class are happier than those who rank themselves in lower social classes.
- Research seem to confirm the Easterlin Paradox that after income of an individual or a country have reached a certain level of income, happiness has not increased accordingly. This may be explained by the idea of positional goods, aspiration, and social comparison. Since an individual cares about his or her position and income relative to other people in his or her reference group, an individual's gain in income does not necessarily translate into greater societal happiness if incomes or consumptions of other people in the reference group rises by a larger extent.
- Relative income is found to be more important than actual income in determining happiness. As a country with more unequal income distribution tends to be less happy on average, it is a rationale to propose income equality as a policy goal (Clark, Frijters, and Shields, 2007).
- Also, relative 'perceived poverty' is important as, controlling income level, people who feel not poorer than their neighbor or feeling "self-sufficient" are happier than those who feel poorer or do not appreciate what they have (Gray and Kramanom, 2007). The finding reflects that a feeling of self-contentedness can help raise an individual's happiness.

## **Social Protection and Social Policies**

- A good retirement plan for the aging population is essential. Individuals are more likely to expect a happy retirement life when

they care and know more about the fund and when they believe that the fund can provide them with a happier retirement. Publicity that raises public confidence in the retirement plan may also raise subjective well-being (Yuen and Chu, 2007).

- The more educated are generally happier than the less educated as indicated in Masa (2007), Gray and Kraman (2007), and Easterlin and Sawangfa (2007). Education not only brings monetary incomes that can raise an individual's standard of living, but it also enables him/her to adjust with changing environments. However, it is suspected that, while education typically leads to greater income it also leads to greater expectation and aspiration. At least in the British data, higher expectation are harder to satisfy, resulting in lower life satisfaction (Powdthavee, 2007b).
- It is not surprising for good health to be a significant determinant of happiness, confirmed by studies conducted in Thailand (Camfield, *et al.*, 2007; McGregor, 2007; Guillen-Royo, *et al.*, 2007; and Gray and Kraman, 2007) and abroad (Van den Berg, 2007a). Positive monetary values of health found by Van den Berg indicate that health positively contributes to an individual's life satisfaction. Such calculations are complementary to the typical cost-benefit analyses of a healthcare program.
- Care provision is becoming increasingly important as population ages and healthcare costs grow, as reported in Van den Berg (2007b). Cost-benefit analysis of informal care should take into account not only earnings foregone by caregivers and professional care expenses saved, but also satisfaction that caregivers and care recipients might enjoy and other non-pecuniary burdens they might suffer. As caregivers who live with recipients tend to suffer greater losses in their well-being, more investment in professional care provision and nursing both for seniors and chronically ill people may be warranted.
- Similarly, Guillen-Royo *et al.* (2007) in their study of seven communities in southern and northeastern Thailand found that while having dependents in the household is not a significant

determinant of happiness, having a chronically ill person in the household significantly reduces happiness of the household head.

- Lange and Georgellis' (2007) results indicate that not only pay affect workers' happiness. He suggests that labor market policies that would most impact workers' satisfaction should address other job aspects, including interaction with colleagues, possibility of achievement, and job security. Union membership is found to have a significant, positive impact on job satisfaction.
- According to Guillen-Royo *et al.* (2007)'s study of southern and northeastern Thailand, people who have a salaried job in Thailand tend to be happier. This may be different from other countries' findings that self-employed are happier. Self-employment in Thailand is often associated with informal sector, in which workers are paid little for having to work in poor conditions and little bargaining power. Incorporation of informal workers into the country's welfare system might improve their satisfaction.

### **Freedom, Unity, Trust, Family, Social and Spiritual Values**

- The more freedom an individual feels he has to control his life, the more satisfied he is with life. Using World Values Survey data set, Verme (2007) found that freedom of choice and control over one's own life always ranks in the top ten of variables that are most highly correlated with life satisfaction regardless of the method or the set of observations considered.<sup>9</sup> He also finds that people who feel that family and religion are more important, people who tend to the right on the political spectrum, and people who are more willing to trust other people are on average happier. On the other hand, those who feel that work is relatively more important than leisure and those who find tax-cheating tolerable tend to be less happy.

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<sup>9</sup> The question asked is: "Please use this scale where 1 means "none at all" and 10 means "a great deal" to indicate how much freedom of choice and control you feel you have over the way your life turns out.

- Trust is essential in maintaining collective actions that benefits people's well-being (Promphakping, 2007). Similar to Verme, Promphakping reported greater spiritual well-being among participants of religious ceremonies, who very likely would have ranked religions as highly important in their lives.
- The WeD research in parts of Northeastern and Southern Thailand found that having good family relationship is highly-ranked as a necessity to individual's well-being, particularly in the urban Northeastern communities.
- While Western economists found the negative relationship between happiness and aspiration or social comparison, Buddhist and sufficiency economy philosophies suggest people can gain happiness by reducing aspiration, accumulation, and social comparison. Gray and Kramanon's case study of two provinces in Central Thailand indicates that a feeling of self-sufficiency or contentment with 'what they have' can help increase in happiness. People, who although may be poor by any standards but are able to adjust to and be satisfied with what they have, are unsurprisingly happier.
- Buddhist moral codes favor giving rather than seeking or accumulating materials. Similarly, the sufficient economy focuses on self-contentedness in human living, which can be explained by reducing aspiration in psychological concept and not affected by its negative effects. Right understanding in the Buddhist middle Path and living with balance life with the society can help people attain greater happiness by themselves, which is opposite to the conventional concept that human seeks and accumulates materials and consumerism to increase happiness.
- Peer production, as suggested by Bruwens (2007), is a new mode of production that focuses on human cooperation and resource-sharing rather than competition and scarcity. In this new mode of production, participation is voluntary and work is reviewed by equal peers. Consequently, workers are inspired, motivated, and empowered. Self-selection of workers into tasks that they are good at should result in higher quality of goods and greater productivity of labor.

Once the production is finished, goods produced in such peer network tend to be more equally distributed in the commons. This new mode of production should add satisfaction to individuals involved and the society as a whole. On one hand, social values of learning, recognition, and exchange realized by producers should earn workers greater satisfaction with jobs, social network, and life as a whole. On the other hand, availability of such goods from this new mode of production constitutes positive externalities for the society, and abundance of goods and knowledge should result in satisfaction gain on part of consumers.

## **Technology**

- The relationship between technology and subjective well-being is multifold and complex. Technologies that enhance such utilization of human capital will improve satisfaction with job and, in turn, overall satisfaction with life (Sawangfa, 2007). It is also arguable that a more satisfied worker works more effectively at her job, thereby further extend the benefit of the given technology.
- Technological advance can also improve people's well-being outside of the production side. The internet and information technology, for example, do not only improve human well-being by easing communication and making useful information more available, but it also forges relationships and cooperation that would not have been possible without the internet. Information technology can also be used to directly monitor people's social activities.
- Information technology can also be used to improve healthcare in remote areas of developing countries. Sherry (2007), cites problems of chronic boredom, loneliness, and lack of meaning among nursing-home residents. Technologies that are designed to allow the elderly to productively contribute to and meaningfully engage with the society should improve the well-being of the elderly and the community at large. An expansion of internet access points would spread more health information and better raise health awareness in remote areas.

- Similar to Intel Corporation's project, National Electronics and Computer Technology Center (NECTEC) applies information technology to health-related issues. By providing computers to hospitals, it alleviates the stress of the patients. Sick children are able to learn, while being hospitalized, and be stimulated physically, mentally, and cognitively.
- The internet can generate and facilitate a new form of economy based on non-reciprocal exchanges, collective and voluntary contribution in exchange for the right to use the communally-produced goods. According to Bruwens (2007), the internet allows peer producers to operate in small groups and globally scale and coordinate. Decision-making and governance are done by participants themselves. Good examples of products that result from this new economic structure are the Linux computer operating system and the online Wikipedia encyclopedia.

### **Environmental and Green Growth Policies**

- Preservation of environment and ecological systems is crucial for both urban and rural communities. Gray and Kramanon (2007)'s study of Chainat and Kanjanaburi indicates that those who live in neighborhood of greater quality tend to be happier. For rural communities, which often rely primarily on agriculture and forestry as major sources incomes, their survivals are directly tied to the survival and the revival of the environment, ecological system, and natural resources. As such, the government may rely on this local tie to the environment, local know-how, and local governance to take care of the environment.
- Urban slums suffer from not only poverty and unemployment but also diseases, crimes, pollution, and poor living conditions. To improve the well-being of these people, the government must make good living conditions and basic infrastructure available and affordable as well as building trust and security.

- For the Green Growth policy, the approach of ecological efficiency indicator (EEI) is recommended by UNESCAP paper by Chung, *et al.*, (2007)<sup>10</sup>. Policies and strategies, namely, are green tax and budget reform, development of sustainable infrastructure, promotion of sustainable consumption and production by improving eco-efficiency of economic growth, and greening the market and business. Ecological-Efficiency Indicator (EEI) would be a powerful policy-formulation tool to measure and compare ecological efficiency of economic growth of different countries and to identify policy measures to improve it on a national, system-wide level.

### **Major Policy Challenges<sup>11</sup>**

Discussions from the research mentioned above may suggest useful guidelines for major policy implications. Based on these discussions, this paper recommends public policies, for example, reduction of poverty and income inequality, tax reform, employment generation, health care, education, social security system, basic need provision, debt reduction and home ownership, the positive information technology, social values, as well as spiritual and mind development to promote happiness (or wellness) and life satisfaction.

An important public policy concern is to mitigate inequality and poverty. Research has found that a country with unequal income distribution tends to be less happy than other countries. Empirical studies show that income has a significant relationship to an individual's happiness, especially at low-income levels. However, once GDP per capita reaches a certain level, there is little gain in happiness and life satisfaction from income. This evidence is also confirmed at macro level, or country level, where high income countries have not gained an increase in happiness and life satisfaction as their income per capita has increased overtime. Given the diminishing marginal return of happiness to income, giving a certain

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<sup>10</sup> Chung, Nikolova and Olsen (2007).

<sup>11</sup> This part is mainly recommended by the first author; the others are not responsible for views expressed here.

income share to the rich would produce less happiness than giving the same amount to the poor. In other words, it is imply that if the same amount of income was allocated to the poor, it would generate more happiness than allocated the same amount to the rich whose happiness more rely on other factors. Therefore, given resource constraints, government spending may aim at generating income for the poor. Public policy reform aimed for poverty reduction also includes improving basic needs and quality of life to the poor in addition to income and employment generation.

While ‘relative income’ is found to be negatively and significantly affect happiness, reducing in income inequality should be an important policy goal. In particular, Thailand has a wide income inequality gap that could make the majority of the people who are relatively poor unhappy. Therefore, fiscal policy reform in taxation and fiscal spending can be designed to reduce income inequality and promote happiness. Given the negative effects of social comparison to happiness, public policies should also aim to reduce socio-economic inequality.

Tax policy can be a useful tool for improving income inequality by redistributing resources in favor of the poor. Progressive income tax would serve this purpose. Given that income has a strong and positive correlation with an individual’s happiness among the low-income, tax exemption that are necessary for the poor in securing happiness may be employed. Tax instrument would also be a powerful policy intervention to many determinant factors affecting happiness such as social comparison and aspiration, work-life balance, as well as environmental aspects. Taxation can be used to reduce social comparison and aspiration for material goods by increasing tax for luxury goods. For work-life balance, tax schemes should be designed to reduce over workload and allow people to have necessary time for family relationship. Tax incentives could also encourage social contribution, i.e., donation, volunteer services, and social works. In addition, environmental and ecological taxes would help internalize environmental costs into the production process. Since tax increases

are usually unpopular, these tax measures may be implemented under a neutral tax reform program that makes total tax expenses of affected persons unchanged, e.g. increased ecological-efficiency tax, but reduced corporate income tax for producers.

Similarly, fiscal spending can be used to allocate resource distribution in favor of the poor. It can be used efficiently to create jobs and more opportunities in life, all of which are to provide capabilities to live their lives to the fullest, as well as to fulfill their basic needs and welfare such as health care, education, and social security.

Since employment positively affects happiness, employment policy is especially important in developing countries/areas that may have limited job opportunities. Employment policy not only contributes to people's happiness but also serve as means to increase economic growth and poverty reduction. In addition, based on positive affect of family, community and social networks to happiness, local job creation would make people happy since they could stay in their communities with their families or friends and within their culture and environment, resulting in reducing migration which is found to affect happiness. Policies that promote employment should also focus on issues surrounding job satisfaction, i.e. working conditions, workers' relationship, job security, and possibility of promotion. Additionally, saving schemes, supplementing pensions, and social security schemes should be pursued in policy reform since these allow workers especially the senior to retire with a good quality of life.

In addition, public policies should also aim to increase happiness and life satisfaction in other domains that affect people. Policies should aim to help the poor with land and home ownership, which are proven to affect people's happiness. The government should ensure good living conditions in communities and affordable basic infrastructure. Policies should also focus on how to solve the debt problems of the poor especially those who fall into poverty trap. In rural economies with high interest rates and debt burden, debt reduction policies may be employed in the short run to allow them to get back

on their feet again. However, these measures must be done with caution to avoid moral hazards and should not be a long-term measure. Instead, policies should promote alternative credit sources such as village saving funds or micro-credit financing

Health care and basic need provision are also necessary for well-being and life-satisfaction. Obviously, good health contributes to happiness. However poor households with low provisions of basic needs have inadequate health care systems and mostly rely on informal care-takers. Since, health is one of the main determinants of happiness, universal health care should be provided to allow the poor and the disadvantaged to have accessible to health care. With growing aging society, health care program should be designed with the aging population in mind by promoting such policies as social security. In addition, mental and spiritual health should be promoted.

For education provision, the government may have to provide compensations to poor households to keep their children in school, at least to finish compulsory level of education. This will lead to the improvement of education attainment. In addition, educational system should ensure quality of education, corporation, spiritual and mind development.

Technologies can be utilized to help people, especially the disadvantaged and the vulnerable by facilitating education and social activities, monitoring health situation, and disseminating information on environmental protection. Peer production – as a new mode of production with cooperation, participation, knowledge sharing, and empowerment – can be facilitated through internet. Government policies should support equipment and knowledge for utilizing information technology to promote happiness and life satisfaction.

Finally, subjective aspects such as values, trust, self-containment, religiosity, and peaceful mind are found to be among the most conducive to happiness. Based on Buddhism, the origin of happiness is from one's state of mind. Therefore, a quality mind with a high level of wisdom development can raise individual happiness. Policy and educational programs should be designed to support positive values

and feelings, as well as encourage people to develop their mind and obtain wisdom with mindfulness. As people are usually familiar with measuring their progress or successes in terms of income level, positions, and social comparison and status, it is a challenge to turn people to realize their real progress and happiness that can occur inside their minds.

## **5. Concluding Remarks**

The PPDO conference brought together academic papers in economics, psychology, sociology, and public policy that focus on finding instruments that would improve people's well-being or happiness. Despite the rich variety of the papers presented at the conference, the majority shares a similar point of view: human happiness cannot be understood without, in part, listening to what human beings have to say. By using reported well-being data, many papers have found non-market factors such as social relationships and health to be two of the most important determinants of happiness for the people in Thailand and elsewhere around the world. Income is also an important instrument in helping improve people's quality of life, especially for low-income people, but overtime its role may have been somewhat exaggerated.

There are at least three important consequences of the conference. The first concerns how to bring these findings forward in order to be incorporated into public policy. The evidence seems to suggest, at the very least, that governments should not aim to put too much weight on policies that only encourage economic growth. While income has been demonstrated to be positively and statistically significantly correlated with higher well-being, the absolute size of its impact is still questionable. Improving incomes for all, for instance, may not lead to improved well-being for all. Thus, if we can all agree that improving people's happiness is a valid policy goal, then policy makers must start paying closer attention to the evidence from micro-data on what other channels will be just as efficient as – if not more than – economic growth when issuing policies in an attempt to raise

people's long-term happiness.

The second is the quality of future research. At this moment, the findings obtained from the conference are far from being exhaustive. Most papers make their inferences from data that are cross-sectional in nature. Whilst the correlations between self-rated happiness and the socio-economic factors of the individual are informative, it cannot be taken as causal (i.e. although we found income to be positively correlated with happiness, we cannot conclude from cross-sectional evidence that the causality runs only from income to happiness and not from happiness to income). As such, care must be taken in interpreting many of the papers' findings. Further, this calls for future developments in the quality of the Thai data, particularly making them longitudinal in nature (i.e. repeated observation of the same individual over time). One reason for this is that many of the unobserved characteristics that do not vary over time (i.e. individual traits) have been shown to be important predictors of both individual's happiness and many of the observable characteristics such as income and employment. Without attempting to control for the unobserved heterogeneity in individual's personalities, we may not be able to make a causal inference which is important for policy purposes on any of the variables of our interests.

As true with any other policy designs, policy makers must carefully consider who is gaining or losing from a certain policy. It is natural that wants and needs of people in a society may contradict one another's, and the question of whose happiness policy makers shall be most concerned with should be the forefront of the policy design process. It is also important for policy makers to evaluate the effectiveness of policies that have been implemented. Therefore, research must go beyond the investigation of the determinants of happiness, which are the origins of public policies, but also continue to evaluate policy effectiveness and impacts of the policy on different groups of people in the society.

Finally, this conference is just the beginning of a serious discussion of happiness research and its implications on public policies.

Perhaps the next step of work that Thailand should take a progress is to deepen the discussion for research and policy designed for Thailand in particular, as there are still many existing challenges to happiness research that need to be overcome before the government can begin to take happiness research and policies seriously. What would be the main concerns if the government chooses to incorporate happiness into the design of public policies? What kind of information and data requirements need to be developed? Could Thailand be one of the pioneering countries that generate policies aiming at making people happier? As Thailand provides a great opportunity for policy reform to promote and secure the people's happiness and life satisfaction, a further international symposium may be planned to enhance these discussion and exchanges experiences together with other nations and experts. Last but not least, a strong governmental commitment is vital to the sustenance of happiness as a primary goal of development.

## References

### A: Conference Papers

Barameechai, J. (2007). "The Green and Happiness Index", *paper presented at International Conference on Happiness and Public Policy*, Bangkok, 18-19 July 2007, organized by Public Policy Development Office under the Office of the Prime Minister of Thailand and UNESCAP.

Bruwens, M. (2007). "Passionate Production and the Happiness Surplus", *paper presented at International Conference on Happiness and Public Policy*, Bangkok, 18-19 July 2007, organized by Public Policy Development Office under the Office of the Prime Minister of Thailand and UNESCAP.

Camfield, L., J.A. McGregor and A. Woodcock (2007). "Needs, Wants, and Wellbeing: Perceived Needs in Northeast and South Thailand," *paper presented at International Conference on Happiness and Public Policy*, Bangkok, 18-19 July 2007,

organized by Public Policy Development Office under the Office of the Prime Minister of Thailand and UNESCAP.

Clark, A.E., P. Frijters and M.A. Shields. (2007). "Income and Happiness: Evidence, Explanations and Economic Implications," *paper presented at International Conference on Happiness and Public Policy*, Bangkok, 18-19 July 2007, organized by Public Policy Development Office under the Office of the Prime Minister of Thailand and UNESCAP.

Chung, R.K., A.S. Nikolova, and S.H. Olsen. (2007). "Happiness and Economic Growth: Green Growth as Regional Strategy for the Well-being of All," *paper presented at International Conference on Happiness and Public Policy*, Bangkok, 18-19 July 2007, organized by Public Policy Development Office under the Office of the Prime Minister of Thailand and UNESCAP.

Cummins, R.A. (2007). "The Distribution of Resources, Population Happiness, and Public Policy," *paper presented at International Conference on Happiness and Public Policy*, Bangkok, 18-19 July 2007, organized by Public Policy Development Office under the Office of the Prime Minister of Thailand and UNESCAP.

Easterlin, R.A. and O. Sawangfa. (2007). "Happiness and Domain Satisfaction: Theory and Evidence," *paper presented at International Conference on Happiness and Public Policy*, Bangkok, 18-19 July 2007, organized by Public Policy Development Office under the Office of the Prime Minister of Thailand and UNESCAP.

Fisher, C.M. (2007). "Neo-Happiness Approach: Lessons from Past Paradigms to Promote the Inclusion of Happiness in International Development," *paper presented at International Conference on Happiness and Public Policy*, Bangkok, 18-19 July 2007, organized by Public Policy Development Office under the Office of the Prime Minister of Thailand and UNESCAP.

Guillen-Royo, M., J. Velazco and L. Camfield. (2007). "Happiness in Thailand: Basic Needs and Wealth in a Context of Rapid Change," *paper presented at International Conference on*

*Happiness and Public Policy*, Bangkok, July 18-19, 2007, organized by Public Policy Development Office and UNESCAP.

Gray, R. and R. Kramanon. (2007). “A feeling of self-sufficiency and happiness among Thai people,” *paper presented at International Conference on Happiness and Public Policy*, Bangkok, 18-19 July 2007, organized by Public Policy Development Office under the Office of the Prime Minister of Thailand and UNESCAP.

Kusago, T. (2007a). “A Challenge to Improve People’s Lives with Policies Mindful of Subjective Well-Beings,” *paper presented at International Conference on Happiness and Public Policy*, Bangkok, 18-19 July 2007, organized by Public Policy Development Office under the Office of the Prime Minister of Thailand and UNESCAP.

Kusago. T. (2007b). “Japan’s Development: what economic growth, human development and subjective well-being measures tell us about?,” *paper presented at International Conference on Happiness and Public Policy*, Bangkok, 18-19 July 2007, organized by Public Policy Development Office under the Office of the Prime Minister of Thailand and UNESCAP.

Lange, T. and Y. Georgellis. (2007). “Trade Union Membership and Happiness at Work: Lessons from Eastern & Western European Labor Markets”, *paper presented at International Conference on Happiness and Public Policy*, Bangkok, 18-19 July 2007, organized by Public Policy Development Office under the Office of the Prime Minister of Thailand and UNESCAP.

Masae, A. (2007). “The Roles of Human, Social and Cultural Resources in Adapting Livelihood Strategies to Meet Well-being Aspirations in Contemporary Thailand,” *paper presented at International Conference on Happiness and Public Policy*, Bangkok, 18-19 July 2007, organized by Public Policy Development Office under the Office of the Prime Minister of Thailand and UNESCAP.

Matthews, E. (2007). “The OECD Global Project on ‘Measuring the Progress of Societies’,” *paper presented at International Conference on Happiness and Public Policy*, Bangkok, 18-19

July 2007, organized by Public Policy Development Office under the Office of the Prime Minister of Thailand and UNESCAP.

McGregor, J.A. (2007). "A Wellbeing Perspective for Understanding Development in Thailand," *paper presented at International Conference on Happiness and Public Policy*, Bangkok, 18-19 July 2007, organized by Public Policy Development Office under the Office of the Prime Minister of Thailand and UNESCAP.

Ogawa, T. (2007). "A New Perspective on Social Development: Social Quality and Its Potential Role for Public Policy Making in Asia and the Pacific," *paper presented at International Conference on Happiness and Public Policy*, Bangkok, 18-19 July 2007, organized by Public Policy Development Office under the Office of the Prime Minister of Thailand and UNESCAP.

Prayukvong, W. (2007). "A Buddhist Economic Approach to Employee Volunteer Program: Happiness in the Workplace," *paper presented at International Conference on Happiness and Public Policy*, Bangkok, 18-19 July 2007, organized by Public Policy Development Office under the Office of the Prime Minister of Thailand and UNESCAP.

Promphakping, B. (2007). "How Can Collective Action Transform Wealth into Well-being?" *paper presented at International Conference on Happiness and Public Policy*, Bangkok, 18-19 July 2007, organized by Public Policy Development Office under the Office of the Prime Minister of Thailand and UNESCAP.

Puntasen, A. (2007). "Why Buddhist Economics is Needed as a New Paradigm for a Better Understanding of Happiness (Wellness)," *paper presented at International Conference on Happiness and Public Policy*, Bangkok, 18-19 July 2007, organized by Public Policy Development Office under the Office of the Prime Minister of Thailand and UNESCAP.

Sarracino, F. (2007). "Subjective Well-being in Low Income Countries: Positional, Relational, and Social Capital Components," *paper presented at International Conference on Happiness and Public Policy*, Bangkok, 18-19 July 2007, organized by Public

Policy Development Office under the Office of the Prime Minister of Thailand and UNESCAP.

Sawangfa, O. (2007). "Does Job Switching Lead to Greater Satisfaction? Evidence from South Korea," *paper presented at International Conference on Happiness and Public Policy*, Bangkok, 18-19 July 2007, organized by Public Policy Development Office under the Office of the Prime Minister of Thailand and UNESCAP.

Sherry, J. (2007). "Designing Technology for Health and Happiness: 3 Cases from Intel Corporation," *paper presented at International Conference on Happiness and Public Policy*, Bangkok, 18-19 July 2007, organized by Public Policy Development Office under the Office of the Prime Minister of Thailand and UNESCAP.

Thinley, J.Y. (2007). "Happiness: New Direction for Development," *paper presented at International Conference on Happiness and Public Policy*, Bangkok, 18-19 July 2007, organized by Public Policy Development Office under the Office of the Prime Minister of Thailand and UNESCAP.

Van den Berg, B. (2007a). "Well-being and the Value of Health," *paper presented at International Conference on Happiness and Public Policy*, Bangkok, 18-19 July 2007, organized by Public Policy Development Office under the Office of the Prime Minister of Thailand and UNESCAP.

Van den Berg, B. (2007b). "The Impact of y, Y Informal Care on Self-reported Well-being", *paper presented at International Conference on Happiness and Public Policy*, Bangkok, 18-19 July 2007, organized by Public Policy Development Office under the Office of the Prime Minister of Thailand and UNESCAP.

Verme, P. (2007). "Happiness & Freedom," *paper presented at International Conference on Happiness and Public Policy*, Bangkok, 18-19 July 2007, organized by Public Policy Development Office under the Office of the Prime Minister of Thailand and UNESCAP.

Warr, P. (2007). "The Economics of 'Enough': Thailand's 'Sufficiency

Economy' Debate," presented at *International Conference on Happiness and Public Policy*, Bangkok, 18-19 July 2007, organized by Public Policy Development Office under the Office of the Prime Minister of Thailand and UNESCAP.

Yuen, W. and W. Chu. (2007). "Can a Force-saving Policy Enhance the Future Happiness of the Society? A Survey Study of the Mandatory Provident Fund (MPF) Policy in Hong Kong," *paper presented at International Conference on Happiness and Public Policy*, Bangkok, 18-19 July 2007, organized by Public Policy Development Office under the Office of the Prime Minister of Thailand and UNESCAP.

**Website:**

[www.ppdoconference.org](http://www.ppdoconference.org) for all conference session papers

**B: Other References**

Balatsky, G. and E. Diener. (1993). Subjective well-being among Russian students, *Social Indicator Research*, 28, 225-43.

Campbell, A., P.E. Converse and W.L. Rodgers. (1976). *The Quality of American Life*, New York: Russell Sage Foundation.

Campbell, A. (1981). *The Sense of Well-Being in America*, New York: McGraw-Hill.

Costa, P.T., and R.R. McCrae. (1988). Personality in adulthood: A six-year longitudinal study of self-reports and spouse ratings on the NEO personality inventory, *Journal of Personality and Social Psychology*, 54(5), 853-863.

Davidson, R.J. (2004). Well-being and Affective Style: Neural Substrates and Biobehavioural Correlates, *Philosophical Transactions of the Royal Society*, 359, 1395-1411.

Diener, E. (1984). Subjective well-being, *Psychological Bulletin*, 93, 542-575.

Diener, E. (2006). Guidelines for National Indicators of Subjective Well-Being and Ill-Being, *Journal of Happiness Studies*, 7(4), 397-404.

Diener, E., M. Diener and C. Diener. (1995). Factors predicting the

subjective well-being of nations, *Journal of Personality and Social Psychology*, 69, 851-864.

Diener, E., R.A. Emmons, R.J. Larsen and S. Griffin. (1985). The Satisfaction with Life Scale, *Journal of Personality Assessment*, 49(1), 71-75.

Doyal, L. and I. Gough. (1991). "A Theory of Human Need," Basingstoke: Macmillan.

Easterlin, R.A. (1974). Does Economic Growth Improve the Human Lot? Some Empirical Evidence, in P.A. David and M.W. Reder (Eds.), *Nations and Households in Economic Growth: Essays in Honour of Moses Abramowitz*, New York and London: Academic Press.

Easterly, W. (2005). What did structural adjustment adjust? The association of policies and growth with repeated IMF and World Bank adjust loans, *Journal of Development Economics*, 76, 1-22.

Eckman, P., R.J. Davidson and W.V. Friesen. (1990). The Duchenne smile: Emotional expression and brain physiology II, *Journal of Personality and Social Psychology*, 58(2), 342-353.

Eid, M. and E. Diener. (2004). Global Judgments of Subjective Well-being: Situational Variability and Long-term Stability, *Social Indicators Research*, 65, 245-277.

Frey, B.S. and A. Stutzer. (2002a). *Happiness and Economics*, Princeton: Princeton University Press.

Frey, B.S. and A. Stutzer. (2002b). What Can Economists Learn from Happiness Research, *Journal of Economic Literature*, 40, 402-435.

Goldings, H.J. (1954). On the avowal and projection of happiness, *Journal of Personality*, 23, 30-47.

Hartog, J. and H. Oosterbeek. (1998). Health, Wealth, and Happiness: Why Pursue Higher Education?, *Economics of Education Review*, 17(3), 245-256.

Headey, B. and Wearing, A. (1991). Subjective Well-being: A Stocks and Flows Framework, in F. Strack, M. Argyle and N. Schwarz (Eds.), *Subjective Well-Being: An Interdisciplinary Perspective*, Oxford: Pergamon Press, 7-26.

Huppert, F. (2006). Positive Emotions and Cognition: Developmental, Neuroscience, and Health Perspectives, in J. Forgas (Ed.), *Heart and Minds: Affective Influences on Social Cognition and Behavior*, Philadelphia: Psychology Press.

Inglehart, R. (1990). *Cultural Shift in Advanced Industrial Society*, Princeton University.

Kittiprapas, S., O. Sawangfa, C.M. Fisher, N. Powdthavee, and K. Nitnitiphrut. 2008. *Happiness: New Paradigm, Measurement, and Policy Implications*, the Synthesis from the International Conference “Happiness and Public Policy,” July 18-19, 2007, Bangkok, Forthcoming.

Koivumaa-Honkanen, H., R. Honkanen, H. Viinamaki, K. Heikkila, J. Kaprio and M. Koskenvuo. (2001). Life Satisfaction and Suicide: A 20-year Follow-up Study, *American Journal of Psychiatry*, 158, 433-439.

Lane, R.E. (2001). *The Loss of Happiness in Market Economies*, New Haven: Yale University Press.

Layard, R. (2005). *Happiness: Lessons from a New Sciences*, London: Allen Lane.

McGregor, S. (2005). Structural adjustment programmes and human well-being, *International Journal of Consumer Studies*, 29, 3, 170-180.

McMahon, D.M. (2006). *Happiness: A History*, New York: Atlantic Monthly Press.

Mosley, P.J. and J. Toye. (1991). *Aid and Power: The Bank & Policy-based Lending Vol. 1*, New York: Routledge.

Mroczek, D. and A. Spiro. (2006). *Personality Change Influences Mortality in Older Men*, Purdue University, mimeo.

Nettle, D. (2005). *Happiness: The Science Behind Your Smile*, Oxford: Oxford University Press.

Oswald, A.J. (1997). Happiness and economic performance, *Economic Journal*, 107, 1815-1831.

Palmore, E. (1969). Predicting longevity: A follow-up controlling for age, *Journal of Gerontology*, 39, 109-116.

Pavot, W. and E. Diener. (1993). Review of the satisfaction with life scale, *Psychological Assessment*, 5, 164-72.

Powdthavee, N. (2007a). Economics of Happiness: A Review of Literature and Applications, *Chulalongkorn Journal of Economics*, forthcoming.

Powdthavee, N. (2007b). Putting a Price Tag on Friends, Relatives, and Neighbours: Using Surveys of Life Satisfaction to Value Social Relationships, *Journal of Socioeconomics*, forthcoming.

Powdthavee, N. (2007c). Is There a Geographical Variations to Psychological Costs of Unemployment in South Africa?, *Social Indicators Research*, 80(3), 629-652.

Robinson, J.P. and P.R. Shaver. (1969). *Measures of Social Psychological Attitudes*, Survey Research Center, Institute for Social Research, Ann Arbor.

Sales, S.M. and J. House. (1971). Job dissatisfaction as a possible risk factor in coronary heart disease, *Journal of Chronic Diseases*, 23, 861-873.

Sandvik, E., E. Diener and L. Seidlitz. (1993). Subjective well-being: The convergence and stability of self and non self report measures, *Journal of Personality*, 61(3), 317-342.

Scitovsky, T. (1976). *The Joyless Economy: An Inquiry into Human Satisfaction and Consumer Dissatisfaction*, New York: Oxford University Press.

Shedler, J., M. Mayman and M. Manis. (1993). The illusion of mental health, *American Psychologist*, 48(11), 1117-1131.

Van de Walle, N. and T. Johnston. (1996). *Improving Aid to Africa*, Washington D.C.: Overseas Development Council.

Van Praag, B.M.S. (1991). Ordinal and Cardinal Utility: An Integration of the Two Dimensions of the Welfare Concept, *Journal of Econometrics*, 50, 69-89.

Urry, H.L., J.B. Nitschke, I. Dolski, D.C. Jackson, K.M. Dalton, C.J. Mueller, M.A. Rosenkranz, C. Ryff, B.H. Singer and R.J. Davidson. (2004). Making a Life Worth Living: Neural Correlates of Well-being, *Psychological Science*, 15, 367-372.