JICA-RI Working Paper

Re-examination of Development Policy from Happiness Study

Happiness in Thailand: The Effects of Family, Health and Job Satisfaction, and the Moderating Role of Gender

Kalayanee Senasu and Anusorn Singhapakdi

No. 76

March 2014

Happiness in Thailand: The Effects of Family, Health and Job Satisfaction, and the Moderating Role of Gender

Kalayanee Senasu [*] and Anusorn Singhapakdi [†]

Abstract

This research investigates the association between family, health, and job satisfaction, and happiness in Thailand. The data were collected by means of telephone survey questionnaires developed by the Japan International Cooperation Agency (JICA). The research data are from simple random sampling and stratified multi-stage sampling from master 2012-NIDA (National Institute of Development Administration) poll data proportioned to the population, age, and household income in each region of Thailand. This poll data had a total of 1,004 respondents but this research focuses on employed people and consists of a total of 799 respondents. All research hypotheses were tested by means of hierarchical regression analysis and analysis of variance was used to verify some interesting issues relating to demographic factors. The analysis results indicate that all three types of satisfaction (i.e., family, health, and job satisfaction) have positive effects on happiness (measured in present and future happiness) in Thailand. Although only family satisfaction has a positive effect on future happiness, all three types of satisfaction have positive effects on present happiness. Additionally, among all three model variables, family satisfaction plays the most important role in predicting present and future aspects of happiness. Further, our results indicate that gender is of little influence as a moderator. Our results not only validate research findings in other countries but also verify the importance of subjective appreciation of life and happiness for public policy makers.

Keywords: Family satisfaction, Health satisfaction, Job satisfaction, Happiness, Thailand

---

[*] Corresponding author, Professor of Economics (Human Resource Management), National Institute of Development Administration, Thailand
[†] Professor of Marketing, Old Dominion University, U.S.A.

Introduction

Happiness is probably the most important aspiration of all human beings. It can also be argued that the pursuit of happiness is the most important direct or indirect factor underlying all human behavior. Therefore, it is not surprising that happiness has always been an important topic for both scholars and the public. In particular, from both religious and philosophical perspectives, there have been stimulating discussions not only about the determinants of happiness but also about what should be the determinants of happiness! Although there have been numerous studies by scholars from across disciplines to try to identify the key determinants of happiness, the results are often weak and, moreover, inconsistent. For instance, the often weak relationship between income and happiness is likely the foremost paradox in economic literature. According to Rojas (2007), there are different theories to explain this paradox. He summarizes these theories as follows (p. 2):

- The *Relative Explanation* states that the impact of income on a person's subjective well-being depends on changing standards based on his/her expectations and social comparisons.

- The *Absolute Explanation* assumes that income is relevant for subjective well-being as long as it satisfies basic needs; it implies the existence of a threshold beyond which the impact of income on subject well-being is nil.

- The *Adaptation Explanation* focuses on a person's ability to adapt to positive and negative events; thus, if a person has high adaptation capabilities he/she can easily adapt to changes in his/her income, so that his/her happiness level does not vary substantially with income.

- The *Aspiration Explanation* states that the degree of satisfaction experienced by a person is related to the ratio of his/her satisfaction to total desires.

Rojas (2007) argued that an alternative explanation for this paradox can be based on the conceptual-referent theory of happiness that essentially purports that a person's degree of happiness can be influenced by his or her notion of what a happy life is. Based on a large database from Mexico, his study results reveal the existence of heterogeneity in the conceptual referent for happiness that people hold. Obviously, the notion of a happy life is beyond having a good income.

The overall goal of this research is to have a better understanding of some of the important determinants of happiness among people in Thailand. Specifically, the objective of this study is to investigate the effects of three types of satisfaction – family, health, and job satisfaction – on present and future aspects of happiness. Although no specific hypotheses of comparative effects will be formulated, another objective of this study is to investigate the relative influences of the three different types of satisfaction on present and future aspects of happiness in Thailand. Given the increasing number of women in the Thai workplace, another objective of this study is to investigate the role of gender as a moderator of the relationship between the three types of satisfaction and the three aspects of happiness. The conceptual model of the proposed study is presented in Figure 1

Figure 1: Conceptual Model
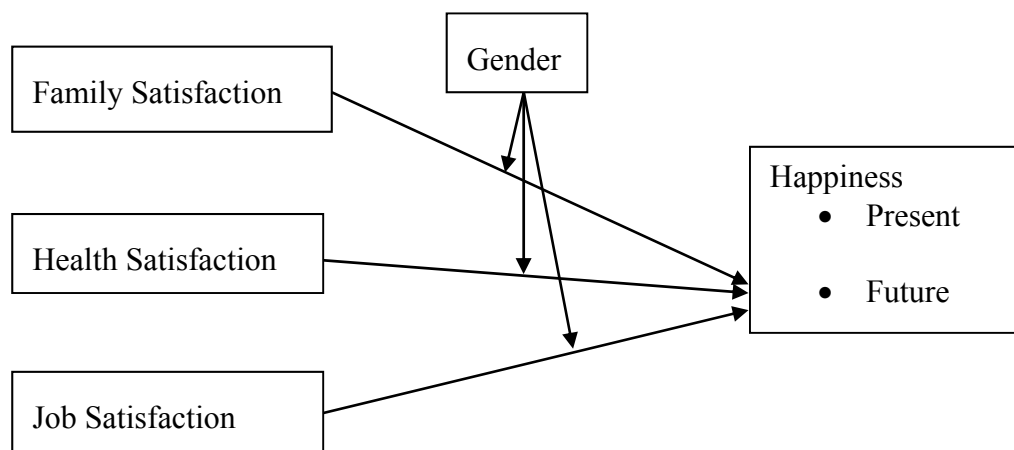
Conceptual Development and Hypotheses

Happiness

The term 'happiness' has been used in various ways. In the widest sense it is an umbrella term for all that is good. Used in this way, 'happiness' is used interchangeably with terms like 'wellbeing' or 'quality of life' and denotes both individual and social welfare. The term 'happiness' is also used more specifically to stand for subjective appreciation of life. Veenhoven (1984: 22-24) defines happiness as *the degree to which an individual judges the overall quality of his/her own life-as-a-whole favorably*. Based on this definition, "happiness" can be construed as an attitude towards one's own life, that has some stability of its own and that involves related feelings and beliefs. Thus, these feelings and beliefs can be viewed as 'components' of happiness.

Veenhoven (2000) attempted to conceptualize the terms *'quality-of-life', 'wellbeing'* and *'happiness'* by proposing a classification based on two bi-partitions; between life 'chances' and life 'results', and between 'outer' and 'inner' qualities. Together these dichotomies imply four qualities of life: 1) livability of the environment (ecological, social, economic, cultural, etc.), 2) life-ability of the individual (physical health, mental health, knowledge, skills, art of living, etc.), 3) objective utility of life (external utility, moral perfection), and 4) subjective appreciation of life (appraisal of life-aspects, prevailing moods, overall appraisal – affective and cognitive). For 'happiness', which is the inner notion, the meaning has two, more narrow, forms; first as a label for all subjective appraisals of life, and second as the overall evaluation of life (i.e., life as a whole).

Defined as the subjective satisfaction with one's life-as-a-whole, happiness is something that we have in mind and things we have in mind that can be measured using questioning. Questions for happiness can be posed in different ways, directly or indirectly, and using single or multiple items. Indirect questioning using multiple items is quite common in psychological research and for that reason the first generation of happiness measures consists mainly of 'inventories' such as the 20-item Life Satisfaction Index of Neugarten et al. (1961).

4

Yet in the case of happiness, the concept is clear-cut and respondents are aware of its definition. Hence happiness can also be measured using a single direct question (Veenhoven, 2012a).

In this paper, happiness covers both subjective appraisal of life and overall evaluation of life. Specifically, we measure two aspects of happiness: *present happiness* and *future happiness* (about five years from the time of collecting data).

Family Satisfaction

Cross-national studies related to family satisfaction indicate some interesting conclusions. For example, Spector et al. (2007) propose that family roles can have more impact on people in collectivistic cultures. Ahmad & Omar (2012) consistently suggest that there is a need to also recognize the importance of family supportive practices, besides formal benefits, as positive outcomes arising from such supportive practices. Additionally, a quantitative study to explore happiness indicators of Malaysians and Indonesians by Jaafar et al. (2012) reveals that among 12 happiness indicators, family is the most important indicator of happiness.

Clearly, family satisfaction or good relationships in a family is an important factor underlying happiness. Drawing upon world studies of happiness, Veenhoven (2012b, 2012c) identifies the following factors as ones associated with happiness rather than unhappiness: living in an economically prosperous country where freedom and democracy are respected; political stability; being a part of a majority rather than a minority; being toward the top of the social ladder; being married and having good relationships with family and friends; being mentally and physically healthy; being active and open-minded; feeling in control of one's life; having aspirations in social and moral matters rather than money-making; and being politically conservative.

Based on the above discussion, the following hypotheses were formulated.

H1.1: Family satisfaction has a positive effect on present happiness.

H1.2: Family satisfaction has a positive effect on future happiness.

Health Satisfaction

Gerdtham & Johannesson (2001) investigate the relationship between happiness (utility) and a host of socio-economic variables in a random sample of over 5,000 individuals from the Swedish adult population. Their results show that happiness increases with income, health and education and decreases with unemployment, urbanization, being single, and male gender. Moreover, they found that the relationship between age and happiness is U-shaped, with happiness being lowest in the age-group 45–64 years. Peir´o (2006) examines the relationships between socio-economic conditions and happiness or satisfaction of individuals in 15 countries. In agreement with earlier studies, age, health and marital status are strongly associated with happiness and satisfaction.

Recent research also suggests that recovery from serious illness and psychological disorder can sometimes be associated with increased endorsement of specific character strengths that contribute to increased life satisfaction (e.g., appreciation of beauty, forgiveness, gratitude, humor, and kindness), whereas a history of illness can be associated with lower levels of life satisfaction among those who have not recovered (Peterson et al., 2006).

Based on the above discussion, the following hypotheses were formulated.

H2.1: Health satisfaction has a positive effect on present happiness.

H2.2: Health satisfaction has a positive effect on future happiness.

Job Satisfaction

Given the importance of work, both economically and socially, one's achievements and experiences at work and the quality of work life is another very important component of overall satisfaction. Obviously, we can expect unemployment or deprivation of work to be important as a negative factor of life satisfaction. One objective of this study is to investigate the effect of job satisfaction on present, future, and overall aspects of happiness in Thailand. Job satisfaction is an important construct for business research because it can have a direct impact on the financial well-being of an organization. For example, the results from a study by Edmans

(2012) of companies listed in the "100 Best Companies to Work For in America" reveal that job satisfaction can be beneficial for firm value (as measured by using future stock returns, controlling for risk, firm characteristics, industry performance, and outliers). According to the author, the positive effect of job satisfaction on corporate performance is consistent with human resource management (HRM) theories. Consistently, empirical studies in the HRM area reveal that job satisfaction is also an important factor of an employee's organizational and personal outcomes. As concluded by Al-Qutop and Harrim (2011, p. 194), based on their extensive literature review, "job satisfaction has been strongly associated with reduced turnover, reduced absenteeism, reduced lateness, reduced complaints, lower rate of complaints, lower rate of thefts, higher social citizenship (willingness to help other employees and customers, and being more cooperative)." It is also important to note that studies in a related area of quality of work life generally indicate a positive relationship between work-life satisfaction and personal-life satisfaction of employees (e.g., Chan & Wyatt, 2007; Sirgy et al., 2008).

Based on the above discussion, we would expect employees who are satisfied with their jobs to be happier with their personal lives – in terms of present as well as future perspectives. In other words, being satisfied with one's job can positively affect different aspects of an employee's personal life, which can translate into happiness. Therefore, we expect job satisfaction to have a positive effect on both present happiness and future happiness of employees. Thus, the following hypotheses were formulated:

H3.1: Job satisfaction has a positive effect on present happiness.

H3.2: Job satisfaction has a positive effect on future happiness.

Gender as Moderator

As noted in the introduction section, given the increasing number of women in the Thai workplace, one objective of our study is also to investigate the role of gender as a moderator of the relationship between different types of satisfaction and the two aspects of happiness. Gender can be an important factor of happiness. As part of their study on the impacts of health and

socio-economic factors on happiness, Gerdtham & Johannesson (2001) conclude that Swedish men have less happiness than Swedish women. While Baral & Bhargava (2011), based on their study of 485 managers in India, found that family support was a significant predictor of family-to-work enrichment. They also found a moderating influence of gender. Specifically, they report that gender moderated the relationship between work-life balance policies and work-to-family enrichment such that the relationship between the two was stronger for women as compared to men. In addition, as they also reported, gender moderated the relationship between job characteristics and work-to-family enrichment such that the relationship between the two was stronger for men than women.

A more direct explanation for the moderating effect of gender on the relationship between satisfaction and happiness is that job preferences as well as weights that women place on different aspects of their jobs tend to be different from those of their male counterparts (Clark, 1997; Hakim, 1996; Sloane & Williams, 2000). For example, studies have revealed that female workers tend to prefer jobs with good co-workers, good supervisors, and the opportunity to help others, while male workers tend to prefer jobs with high income, responsibility, and opportunities for leadership (Konrad et al., 2000). Particularly relevant to our study, it has been reported that these job preference differences can be a result of women's stronger desire to integrate work with family life (Garey, 1999).

As discussed above, we generally expect all three types of satisfaction (i.e., family, health, and job satisfaction) to have positive effects on present and future aspects of happiness in Thailand. However, we believe the impacts of these different types of satisfaction to be moderated by gender. That is, we believe the degree of positive effects of the three types of satisfaction on present happiness, and expected future happiness would tend to be different between men and women. Specifically, we believe women will tend to value family and health types of satisfaction more so than men. However, we believe men will tend to value job satisfaction more so than women. This may be partly because women, compared to their male

counterparts, tend to place more importance on family and health than their careers. Therefore, the following hypotheses will be tested:

H4.1: The positive effect of family satisfaction on present happiness is greater for women than for men.

H4.2: The positive effect of family satisfaction on future happiness is greater for women than for men.

H4.3: The positive effect of health satisfaction on present happiness is greater for women than for men.

H4.4: The positive effect of health satisfaction on future happiness is greater for women than for men.

H4.5: The positive effect of job satisfaction on present happiness is greater for men than for women.

H4.6: The positive effect of job satisfaction on future happiness is greater for men than for women.

Methodology

Samples and data collection

This research uses a telephone questionnaire as the data-collection technique. The questionnaire was developed by the Japan International Cooperation Agency (JICA) in order to develop a better understanding of "happiness" in Thailand. The questionnaire was translated from English to Thai keeping the meaning as close to the original English as possible but also making sure that the language was understandable by Thai people. The questionnaire was pre-tested on a sample of 20 cases and was amended by abridging and/or simplifying some questions to make them more concise and easier to understand.

The research data reported in this study were from simple random sampling and stratified multi-stage sampling as part of master 2012- NIDA (National Institute of Development Administration) poll data. The sampling approach was calibrated to make sure that the raw data

is nationally representative without having to use weights. Specifically, the sampling was directly proportioned according to the size of the population, age, and household income in each of the regions in Thailand, including the Bangkok metropolitan area.

There are a total of 1,004 respondents. However, since this research focuses on people who are employed, only a total of 799 employed respondents were included. Of the 799 respondents, 49.7% work full-time, 2.5% work part-time and 47.8% were self-employed. The majority of respondents were male (52.1%), aged between 25-54 years of age (70.3%), with a household income of between 10,001-30,000 baht (42.0%). Regarding the level of education, the highest percentage was for bachelor's degree (31.8%). The largest single group of respondents lived in the northeast region (28.2%). See Table 1 for a more detailed profile of the respondents of this research. It should be noted that the respondents' profile is quite comparable to the national statistics of the Thai workforce aged 15-70 years old (National Statistical Office, 2012, also included in Table 1 for comparison purposes). However, the respondents' educational level is higher than the general population (the educational level for the majority of respondents is bachelor's degree, while for the general population it is no education/primary level). Additionally, the household income of the respondents seems to be higher than that of the general population. This may be because data were collected via telephone questionnaire interview and would therefore not cover people who live in remote areas and/or do not own a telephone. Another reason is that only employed respondents were included in our analysis and, therefore, a higher educational level as well as higher household income would be expected.

Table 1 Respondent Profiles (N=799)

Variables	% Respondents	% Population	Variables	% Respondents	% Population
Gender					
Female	47.9	46.0	*Educational level*		
Male	52.1	54.0	No/Primary	22.3	54.3
Age			Junior high school /Technical/ Vocational	14.0	15.7
15-24	11.9	20.1	Senior high school/ Preparatory College	14.4	10.4
25-34	23.0	21.9	Some college	8.4	3.4
35-44	25.0	22.8	Bachelor	31.8	15.9
45-54	22.3	19.5	Graduate	9.1	NA
55-70	17.8	12.2			
Household Income*			*Region*		
≤ 10,000	6.8	NA	Bangkok Metropolitan	12.8	12.6
10,001-20,000	20.0	NA	Central	26.2	27.7
20,001-30,000	22.0	NA	North	18.9	17.5
30,001-40,000	8.8	NA	Northeast	28.2	28.8
>40,000	42.4	NA	South	14.0	13.5

Note: * Average household income for the respondents = 84,610 baht/month with a median = 35,000 baht/month. Average household income for the whole kingdom = 23,236 Baht/month.

NA= Not Available

Measurement

As stated previously, the concept of happiness is straightforward. Hence, happiness can also be measured using a single direct question (Veenhoven, 2012a). In our study, *present happiness* was measured with an 11-point Likert-type scale ranging from "extremely unhappy" (value of 0) to "extremely happy" (value of 10). Specifically, the question used to measure *present happiness* is, "Taking all things together, how happy would you say you are? Please mark a 10 on a scale if

you are very happy and 0 if you are very unhappy." *Future happiness* was measured by posing this question, "Taking all things together, how happy would you say you will be in the future, say about five years from now?" An 11-point Likert-type scale was also used but with the scale ranging from "much unhappier" (value of -5) to "same as now" (value of 0), and "much happier" (value of +5).

The three predictor variables of this study, *family satisfaction*, *health satisfaction* and *job satisfaction* were measured with a 5-point Likert-type scale ranging from "completely dissatisfied" (value of 1) to "completely satisfied" (value of 5). The questions used to measure these three variables are: "How satisfied are you with your family?", "How is your health in general?" and "How satisfied are you with your job?" respectively.

Results

Table 2 illustrates the descriptive statistics of all 799 respondents. Certain demographic variables were analyzed differently depending on the purpose of the analysis. For hierarchical analyses, four dummy variables of region were coded and analyzed (Akin & West, 1991). The northeast was the arbitrary reference category and the four dummy variables were Bangkok Metropolitan Area (BKK), central region, northern region, and southern region. The variables "real age" and "log of household income (Log HHInc)" are typical forms as recommended by Kahneman and Deaton (2010) and were also analyzed as part of the hierarchical regression analyses as control variables. In addition to their conclusion in hierarchical analyses, the variables region, household income, and age were also categorized into groups for analysis of variance (ANOVA) to explore some potential differences among all dependent and model variables. The variable "education" was categorized into 6 levels from no/primary level to graduate level, while gender was coded 0 for male and 1 for female. Both education and gender were analyzed using hierarchical regression analyses and ANOVA.

Table 2: Descriptive statistics of all variables

	N	Minimum	Maximum	Mean	Std. Deviation
Region	799	1	5	3.05	1.271
BKK	799	0	1	.13	.334
CENTRAL	799	0	1	.26	.440
NORTH	799	0	1	.19	.392
SOUTH	799	0	1	.14	.347
Household Income	799	1	5	3.60	1.377
Log HHInc	799	3.48	6.48	4.6331	.43651
Age	799	1	5	3.11	1.277
Real Age	799	15	70	40.91	13.164
Education	799	1	6	3.41	1.745
Gender	799	0	1	.48	.500
Family satisfaction	799	1	5	4.39	.685
Health satisfaction	799	2	5	3.97	.772
Job satisfaction	799	1	5	4.33	.712
Present Happiness	799	0	10	6.96	1.749
Future Happiness	799	-5	5	1.79	1.906

Table 3 shows the correlation matrix of all variables. The correlation results indicate that both measures of happiness (i.e., present, and future happiness) correlate significantly ($p < 0.01$, and $p < 0.05$) with all satisfaction variables (i.e., family, health, and job satisfaction) at a low level. In addition, present and future happiness also correlate significantly ($p < 0.01$, and $p < 0.05$) with some demographic variables. Specifically, present happiness has positive low level correlations ($p < 0.01$, and $p < 0.05$) with Bangkok metropolitan, household income (in log form) and educational level; and a negative low level correlation ($p < 0.01$) with the central region. Future happiness has a positive low level correlation ($p < 0.01$) with log of household income, but has a negative low level correlation ($p < 0.01$) with real age.

Table 3 Pearson correlation coefficients of all variables

	BKK	CENTRAL	NORTH	SOUTH	Log HHInc	Education	Real Age	Gender	Family satisfaction	Health satisfaction	Job satisfaction	Present Happiness	Future Happiness
BKK	1												
CENTRAL	-.228**	1											
NORTH	-.185**	-.287**	1										
SOUTH	-.154**	-.240**	-.195**	1									
Log HHInc	.166**	-.105**	-.058	.147**	1								
Education	.143**	-.066	-.007	.071*	.263**	1							
Real Age	-.001	.038	-.004	-.088*	.001	-.243**	1						
Gender	.001	-.007	-.002	.017	.043	.023	.019	1					
Family satisfaction	.137**	-.158**	.111**	-.057	.145**	.164**	-.051	-.018	1				
Health satisfaction	.153**	-.099**	.071*	-.034	.052	.209**	-.176**	-.075*	.243**	1			
Job satisfaction	.050	-.130**	.106**	-.049	.121**	.121**	-.002	-.020	.358**	.187**	1		
Present Happiness	.081*	-.113**	.063	-.028	.073*	.125**	-.061	.062	.294**	.192**	.202**	1	
Future Happiness	-.003	.065	.015	-.046	.106**	.066	-.077*	-.014	.158**	.079*	.100**	.291**	1

Note: *Correlation is significant at the 0.05 level (2-tailed).   **Correlation is significant at the 0.01 level (2-tailed).

All research hypotheses were tested by means of hierarchical regression analysis. Tables 4 and 5 include the hierarchical regression analysis results for hypotheses regarding the two dependent variables of *present happiness*, and *future happiness* for the employed Thai respondents.

As summarized in Table 4, there are seven control variables specified as independent variables for model 1 with three model variables as independent variables for model 2. In addition, gender and interaction of gender with each model variable were included for models 3 to 5, and gender and interaction of gender with all three model variables were included for model 6. For *present happiness*, as summarized in Table 4, the results indicate the following important findings: (1) Control variables significantly influence *present happiness* (adjusted R^2 = 0.027). (2) Respondents who live in the central region have significantly lower *present happiness* than those who live in the northeast region (significant negative relationship in model 1, β= -0.095, *p* < .05). (3) Higher educational level groups have higher *present happiness* (significant positive relationship in model 1, β= .098, *p* < .05). (4) All three model variables (i.e., family satisfaction, health satisfaction, and job satisfaction) play important roles in predicting *present happiness* (adjusted R^2 increases to .105). Therefore, we can conclude that all three aspects of life satisfaction (i.e., family, health, and job satisfaction) have a positive effect on *present happiness*. (5) Family satisfaction plays the most important role in predicting *present happiness* (β = .215, *p* < .01). Apparently, for employed Thai people, the role of family life is still the most important factor of their happiness (i.e., more important than health and job satisfaction). (6) The results from model 3, model 5, and model 6 reveal that females have significantly higher *present happiness* than males (β = 0.392, 0.401, and 0.565, respectively; *p* < .10, and p<.05). (7) The interaction term between gender and each or all three model variables; that is either family satisfaction, health satisfaction, job satisfaction, or all these three model variables together in models 3 to 6, respectively, do not have any effect on *present happiness*.

Table 4: Effects of control and model variables on *present happiness*

Variable	Present Happiness					
	Std Beta	Std Beta	Std Beta	Std Beta	Std Beta	Std Beta
	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6
Control variable						
BKK	0.037	0.007	0.002	0.007	0.004	.001
CENTRAL	-.095**	-.056	-.061	-.055	-.059	-.062
NORTH	0.035	0.004	0.000	0.004	0.000	-.001
SOUTH	-.055	-.027	-.028	-.027	-.028	-.029
Log HH Income	0.041	0.010	0.008	0.008	0.006	.007
Education	0.098**	0.048	0.046	0.046	0.048	-.023
Real Age	-.038	-.020	-.022	-.021	-.023	.049
Model variable						
Family satisfaction		0.215***	0.264***	0.215***	0.211***	.245***
Health satisfaction		0.101***	0.107***	0.127***	0.108***	.113**
Job satisfaction		0.090**	0.089**	0.092**	0.149***	.134**
Gender			0.392*	0.185	0.401*	.565**
Gender*FS			-.323			-.220
Gender*HS				-.112		-.029
Gender*JS					-.334	-.253
Adjusted R^2	0.027	0.105	0.111	0.109	0.112	.110
F	4.105***	10.392***	9.315***	9.149***	9.351***	8.073***

* $p < .10$ level, ** $p < .05$ level, *** $p < .01$ level

For future happiness, as summarized in Table 5, the results indicate the following important findings: (1) Control variables significantly influence future happiness (adjusted R^2 = .020). (2) Respondents who live in the central region have significantly higher *future happiness* than those who live in the northeast region (significant positive relationship in model 1, β= 0.078, p < .10). (3) Higher household income has higher future happiness, while lower age groups have higher future happiness (significant positive and negative relationships in model 1 (β=0.118, p < .01; and β= -.078, p < .05, respectively). (4) When we added all three model variables in model 2 (i.e., family satisfaction, health satisfaction, and job satisfaction), only family satisfaction significantly influences future happiness (β = .131, p < .01; and adjusted R^2 increases to .040). (5) When we added gender and interaction term between gender and a model variable, and gender and all three model variables together (that is, either family satisfaction, health satisfaction, or job satisfaction in models 3 to 5; and all those three variables together in model 6, respectively), besides family satisfaction, health satisfaction is also significant ((β=0.140, p < .01; and β= 0.137, p < .01, for model 4 and model 6, respectively). Therefore, we can conclude that two aspects of life satisfaction (i.e., family, and health satisfaction) have a positive effect on *future happiness*. Apparently, family and health satisfaction play equally important roles in predicting *future happiness* (β = .127 vs. 0.140, p < .01; and β = .179 vs. 0.137, p < .01, in model 4 and model 6, respectively). (6) The results from model 4 and model 6 reveal that females have significantly higher *future happiness* than males (β = 0.595, p < .01; and 0.552, p<.10, respectively). The negative significance of the interaction term between gender and health satisfaction (β = -0.618, p < .01; and β = -0.611, p < .01, in model 4 and model 6, respectively) indicates that the effect of health satisfaction on future happiness is positive for men and negative for women. In other words, the positive effect of health satisfaction on future happiness is greater for men than for women. Thai employed men, who have higher health satisfaction than Thai employed women, as has been shown in the negative correlation between health satisfaction and gender (-0.075, p<.05 in table 3), expect higher future happiness than Thai employed women.

Table 5: Effects of control and model variables on *future happiness*

Variable	Future Happiness					
	Std Beta	Std Beta	Std Beta	Std Beta	Std Beta	Std Beta
	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6
Control variable						
BKK	-.009	-.023	-.029	-.021	-.022	-.023
CENTRAL	0.078*	0.100**	0.093**	0.102**	0.101**	0.100**
NORTH	0.033	0.017	0.014	0.021	0.018	0.021
SOUTH	-.048	-.032	-.034	-.030	-.032	-.031
Log HH Income	0.118***	0.100***	0.101***	0.107***	0.101***	0.108***
Education	0.026	0.001	0.003	0.007	0.000	-.067*
Real Age	-.078**	-.071**	-.072**	-.068*	-.071*	0.005
Model variable						
Family satisfaction		0.131***	0.187***	0.127***	0.132***	0.179***
Health satisfaction		0.031	0.030	0.140***	0.030	0.137***
Job satisfaction		0.046	0.044	0.051	0.027	-.013
Gender			0.355	0.595***	-.119	0.552*
Gender*FS			-.373			-.318
Gender*HS				-.618***		-.611***
Gender*JS					0.112	0.356
Adjusted R^2	0.020	0.040	0.041	0.052	0.038	0.053
F	3.270***	4.345***	3.853***	4.631***	3.642***	4.190***

* $p < .10$ level, ** $p < .05$ level, *** $p < .01$ level

We believe it would be interesting to explore some potential demographic differences for all dependent and model variables. The analysis of variance (ANOVA) reveals that overall, demographic factors have some, but not dominant relationships with present happiness and future happiness (see Tables 6 to 10).

For the analysis of variance of present happiness, some important findings based on our analysis of the demographic factors can be summarized as follows:

(a) respondents residing in the Bangkok metropolitan area have the highest present happiness and those in the Central region have the lowest present happiness;

(b) respondents with a household income of ≤ 10,000 baht/month have significantly less present happiness than those with a household income of ≥ 30,000 baht/month;

(c) female respondents have higher present happiness than their male counterparts;

(d) respondents aged 45 to 54 have less present happiness than younger groups; and

(e) respondents from the junior high school/technical/vocational group have significantly less present happiness than those in higher educational groups.

Table 6: Test for relationships among demographic factors and present happiness (PH) using ANOVA

Variables	F (P value)	Interpretation
Region	3.902 (.004)	Bangkok metropolitan area has the highest PH, and the central region has the lowest PH
Household income (HHI)	2.574 (.037)	HHI ≤ 10,000 baht has significantly less PH than HHI ≥ 30,000 baht
Gender	3.093(.079)	Females have higher PH than males
Age	2.061(.084)	Respondents in age range of 45-54 have less PH than those in younger groups
Education	3.641(.003)	Junior HS/Technical/Vocational group has sig. less PH than higher educational groups

For the analysis of variance of future happiness, some important findings based on our

analysis of the demographic factors can be summarized as follows:

(a) there is no difference in expected future happiness among the different regions;

(b) those with a household income of 10,001-20,000 baht/month expect significantly less future happiness than those with a household income of > 40,000 baht/month;

(c) there is no gender difference for future happiness;

(d) respondents aged 25 to 34 have higher future happiness than those in the 55 to 70 age group; and

(e) different educational levels show no difference in terms of future happiness.

Table 7: Test for relationships between demographic factors and future happiness (FH) using ANOVA

Variables	F (P value)	Interpretation
Region	1.246 (.290)	No difference
Household income (HHI)	1.959 (.099)	HHI 10,001-20,000 baht/month has significantly less FH than HHI>40,000 baht/month
Gender	.152 (.696)	No difference
Age	2.026 (.089)	Those aged 25-34 have higher FH than the 55-70 age group
Education	1.301 (.261)	No difference

Regarding the analysis of variance of family satisfaction, some important findings based on our analysis of the demographic factors can be summarized as follows:

(a) respondents in the Bangkok metropolitan area group have the highest family satisfaction, and respondents in the Central region have the lowest family satisfaction;

(b) respondents with a household income of > 30,000 baht/month have significantly higher family satisfaction than those from lower household income groups;

(c) there is no gender difference for family satisfaction;

(d) people in the age range of 35 to 44 have higher family satisfaction than people in the 55 to 70 age group; and

(e) respondents with a bachelor's or graduate degree have higher family satisfaction than those in lower educational level groups.

Table 8: Test for relationships between demographic factors and family satisfaction (FS) using ANOVA

Variables	F (P value)	Interpretation
Region	9.928 (.000)	Those in the Bangkok metropolitan area have the highest FS, and those in the Central region have the lowest FS
Household income (HHI)	7.601 (.000)	HHI >30,000 baht/month has sig. higher FS than lower HHI groups
Gender	0.271 (.603)	No difference
Age	1.268 (.281)	Age range 35-44 has higher FS than 55-70 age group
Education	5.248 (.000)	Bachelor's- and graduate-level groups have higher FS than lower educational-level groups

For the analysis of variance of family satisfaction, some important findings based on our analysis of the demographic factors can be summarized as follows:

(a) respondents in the Bangkok metropolitan area report the highest health satisfaction, and those in the central region report significantly lower health satisfaction than those in the Bangkok metropolitan area and the northern region;

(b) respondents with a household income of $\leq$ 20,000 baht/month have significantly lower health satisfaction than those in higher household income groups;

(c) female respondents have higher health satisfaction than their male counterparts;

(d) people in the age range of 55 to 70 have significantly lower health satisfaction than those in younger groups; and

(e) people with a bachelor's or graduate level of education have significantly higher health satisfaction than those with junior high school/technical/vocational and lower education.

Table 9: Test for relationships between demographic factors and health satisfaction (HS) using ANOVA

Variables	F (P value)	Interpretation
Region	7.122 (.000)	Bangkok metropolitan area has the highest HS, and the central region has sig. lower HS than Bangkok and the northern region
Household income (HHI)	3.566 (.007)	HHI ≤ 20,000 baht/month has sig. lower HS than higher HHI groups
Gender	4.488 (.034)	Females have higher HS than males
Age	6.141 (.000)	Age range of 55-70 has sig. lower HS than younger age groups
Education	7.817 (.000)	Bachelor's and graduate educational-level groups have sig. higher HS than junior high school/technical/ vocational and lower education groups.

For the analysis of variance of job satisfaction, some important findings based on our analysis of the demographic factors can be summarized as follows:

(a) the central region has significantly lower job satisfaction than other regions;

(b) groups with a household income of $\leq 20,000$ baht/month have significantly lower job satisfaction than groups with a household income of $> 40,000$ baht/month;

(c) there is no gender difference for job satisfaction;

(d) respondents in different age ranges are not significantly different in terms of job satisfaction; and

(e) groups with educational levels of bachelor's degree and graduate degrees have significantly higher job satisfaction than junior high school/technical/vocational and lower education groups.

Table 10: Test for relationships between demographic factors and job satisfaction (JS) using ANOVA

Variables	F (P value)	Interpretation
Region	5.469 (.000)	Respondents in the central region have sig. lower JS than those in other regions
Household income (HHI)	2.702 (.030)	Groups with HHI $\leq 20,000$ baht/month have sig. lower JS than those with HHI>40,000 baht/month
Gender	0.309 (.578)	No difference
Age	0.948 (.435)	No difference
Education	3.989 (.001)	Bachelor's- and graduate-level education groups have sig. higher JS than junior HS/technical/vocational and lower education groups

Discussion

The findings of this research are generally consistent with those of previous studies on happiness in other countries (e.g., Spector et al, 2007; Jaafar et al., 2012; Veenhoven, 2012a) in that all three types of satisfaction (i.e., family, health, and job satisfaction) have positive effects on happiness for people in Thailand. For employed Thai people, the role of family life is the most important factor of their present happiness (i.e., more important than health and job satisfaction). This finding is consistent with that of Jaafar et al. (2012) who also reported that among 12 happiness indicators, family is the most important indicator of happiness. Further, the results also verify previous studies that the role of the family is a very important underlying factor of happiness (Veenhoven, 2012) – this is especially the case for the more collectivistic societies (Spector et al, 2007; Jaafar et al., 2012). Given that Thailand is a collectivistic society, our results confirm those from the extant literature.

Our results reveal that women have higher present happiness than men, while they indicate a higher level of future happiness than men only when gender is interacted with health satisfaction. The conclusion of higher happiness for Thai women than Thai men is consistent with the finding of Gerdtham & Johannesson (2001) who concluded that Swedish men have less happiness than Swedish women. However, Stevenson and Wolfers (2009) provide evidence that women in the United States over the last several decades experienced an absolute and relative decline in happiness. While Herbst (2011) found that men and women between 1985 and 2005 experienced similar decreases in life satisfaction.

In this study, we expected the relationships between the three types of satisfaction (family, health, and job satisfaction) and the different aspects of happiness in Thailand to be moderated by gender. However, our results indicate that gender has only a limited influence as moderator of these relationships. Our results are generally consistent with those of Barel & Bhargava (2011). In this study, we hypothesize that the impacts of the different types of

24

satisfaction on happiness are moderated by gender (hypotheses 4.1 to 4.6). *For present happiness*, the results reveal that although women have more present happiness than men, they do not tend to value family and health types of satisfaction more than men as hypothesized. Our results also indicate that women do not value job satisfaction less than men. With the mediation by female gender and the interaction term of gender and health satisfaction, family and health satisfaction play equally important roles in predicting *future happiness*. Additionally, gender significantly moderates the relationship to health satisfaction such that the effect of health satisfaction on future happiness is greater for men than for women. The reason why we found a limited gender role as a moderator of the influences of the three types of satisfaction on various aspects of happiness may be due to the reality in modern Thai society that both men and women need to enter the labor market to be able to support their families. As shown in Table 1, from all the 38.7 million Thai people in the workforce aged 15-70 years old, the proportions of male and female are 54% and 46%, respectively (National Statistical Office, 2012). Therefore, in modern Thai society, both Thai men and women are becoming quite similar in the way they value family and job.

A number of previous studies have explored the relationship between income and happiness. Our study reveals that there is a significant relationship between both aspects of happiness and income. Specifically, higher income groups tend to have higher present and future aspects of happiness. Our results are consistent with those from previous studies. Kolstad (1995) confirmed that people with lower incomes also expressed less satisfaction with both their leisure and with life in general. Additionally, it was found that more income goes hand in hand with happiness for people in emerging countries (Graham & Pettinato, 2002) as well as in a developed country like Sweden (Gerdtham & Johannesson, 2001). However, when this association is deeply investigated at the individual level, the relationship between happiness and income is heterogeneous in the conceptual referent (Rojas, 2007). That is, while income is an important

determinant of happiness for some people, for others it is completely irrelevant; and this depends on the conceptual referent for happiness a person holds.

Besides gender and income, the effects of other background variables (age group, and education level) were relatively small. Although little was gained by introducing these demographic variables in the model, it can be concluded that some of the sociological variables did have interesting influences on those aspects of happiness. Generally, the results from our study show higher *present happiness* among higher income groups, women, younger age groups, and more educated groups. For *future happiness*, it appears that there are significant differences only among higher income groups and age groups. While Gerdtham & Johannesson (2001) found that the relationship between age and happiness for Swedish is U-shaped, with happiness being lowest in the age-group 45–64 years, our study similarly reveals that the happiness of Thai employed people declines as they grow older, and have the lowest happiness at the age range of 45-54.

Some of the limitations of this study should be noted. The three model variables (family satisfaction, health satisfaction, and job satisfaction) can add the power of variance explanation by only 2 to 8% to the demographic models for both aspects of happiness. For all the models, the amount of variance explained was generally low. The results indicate that more appropriate models using other variables may be required. It is likely that we need more appropriate psychological and sociological variables as well as more sophisticated modelings to explain the variances in happiness. Therefore, for future research, it may be interesting to also include some other types of contextual measurements in different dimensions of environmental livability (ecological, social, economic, cultural, etc.) and other objective life utilities (housing, electricity, transportation, etc.) in the models. In the present case, we should be careful not to over interpret the results based on regression models where only subjective appreciation of life and selected life-ability (physical health, mental health, knowledge, skills, art of living, etc.) of individual difference variables (income, education, etc.) have been included as possible

explanations of happiness. However, one conclusion stands firm: satisfaction with one's subjective appreciation of life (family satisfaction, health satisfaction, and job satisfaction) is a better predictor of happiness than material possessions (e.g., income).

To the best of our knowledge this is the first study on the impacts of subjective appreciation of life on the two aspects of happiness (present and future happiness) in Thailand or in any other Asian country. Since our research is in the context of Thailand, which is an Asian developing economy, it further validates the findings generated from other studies that were conducted in non-Asian developing, and Western/developed economies. Therefore, we believe our research is a significant contribution to the literature. As has been shown by previous studies, and validated by this one in the context of a developing economy in Asia, at least some forms of subjective appreciation of life can have a positive impact on one's happiness. As previously mentioned, our research findings seem to support the research framework that proposes that satisfaction with one's subjective appreciation of life (family satisfaction, health satisfaction, and job satisfaction) is a better predictor of happiness than focusing solely on material possessions (e.g., income). Given that the aim of public policies in many countries is gross domestic happiness (GDH), whether to replace or to supplement gross domestic product (GDP), public policy makers need subjective indicators in addition to objective indicators. Though subjective indicators have their limitations, objective indicators also have some serious shortcomings. The challenge of public reporting, therefore, is to combine the strengths of both types of indicators and to make sense of the discrepancies they show. Therefore, this research, which fortifies the proposition by many scholars that satisfaction with one's subjective appreciation of life is a substantial predictor of happiness, contributes to public policy making.

References

Ahmad, A., & Omar, Z. (2012). Effects of Informal Work-Family Support on Job Performance: Mediating Roles of Work-Family Conflict and Job Satisfaction. The Journal of International Management Studies, 7(2), 202-206.

Akin, L., & West, S. (1991). Multiple Regression: Testing and Interpreting Interactions. Thousand Oaks, California: Sage Publications, Inc.

Al-Qutop, M., & Harrim, H. (2011). Quality of work life/human well-being linkage: Integrated conceptual framework. International Journal of Business Management, 6 (8), 193-205.

Baral, R. & Bhargava, S. (2011). Examining the moderating influence of gender on the relationships between work-family antecedents and work-family enrichment. Gender in Management: An International Journal, 26(2), 122-147.

Chan K., & Wyatt, T. A. (2007). Quality of work life: A study of employees in Shanghai, China. Asia Pacific Business Review, 13(4), 501–517.

Christian Bjørnskov, C. (2008). Healthy and happy in Europe? On the association between happiness and life expectancy over time. Social Science & Medicine, Volume 66(8), Issue 8, April 2008, Pages 1750-1759.

Clark, A. (1997). Why are women so happy at work? Laboratory Economics, 4, 341-372.

DeVoe, S., & House, J. (2012). Time, money, and happiness: How does putting a price on time affect our ability to smell the roses? Journal of Experimental Social Psychology, 48(2), 466-474.

Edmans, A. (2012). The Link Between Job Satisfaction and Firm Value, With Implications for Corporate Social Responsibility. Academy of Management Perspectives, 26 (4), 1-19.

Garey, A. (1999). Weaving work and motherhood. Philadelphia, PA: Temple University.

Gerdtham, U., & Johannesson, M. (2001). The relationship between happiness, health, and socio-economic factors: results based on Swedish microdata. The Journal of Socio-Economics, 30(6), 553-557.

Graham, C., Pettinato, S., (2002). Frustrated achievers: winners, losers, and subjective well-being in new market economies. Journal of Development Studies, 38, 100–140.

Hakim, C. (1996). Key issues in women's work: Female heterogeneity and the polarization of women's employment. London, UK and Atlantic Highlands, NJ: Athlone Press.

Herbst, C. (2011). 'Paradoxical' decline? Another look at the relative reduction in female happiness. Journal of Economic Psychology, 32(5), 773-788.

Jaafar, J., Idris, M., Ismuni, J., Fei, Y., Jaafar, S., Ahmad, Z., Ariff, M., Takwin, B., Sugandi, Y. (2012). The Sources of Happiness to the Malaysians and Indonesians: Data from a Smaller Nation. Procedia - Social and Behavioral Sciences, 65(3), 549-556.

Kahneman, D., & Deaton, A. (2010). High income improves evaluation of life but not emotional well-being. Retrieved from www.pnas.org: www.pnas.org/cgi/doi/10.1073/pnas.1011492107

Kolstad, A. (1995). Chapter 6: Satisfaction in Norway. In: Willem E. Saris, Ruut Veenhoven, Annette C. Scherpenzeel & Brendan Bunting (Eds.) 'A Comparative Study of Satisfaction with Life in Europe'. Eötvös University Press, Budapest, pp. 133-144.

Konrad, A., Corrigall, E., Lieb, P., & Ritchie, J. (2000). Sex differences in job attribute preferences among managers and business students. Group and Organization Management, 25, 108–31.

Moltafet, G., Mazidi, M., & Sadati, S. (2010). Personality traits, religious orientation and happiness. Procedia - Social and Behavioral Sciences, Volume 9, 2010, Pages 63-69.

National Statistical Office. (2012). Key Statistics of Thailand, 2012. Bangkok: Statistical Forecasting Bureau.

Neugarten, B. L., Havinghurst, R. J., & Tobin, S. S. (1961). The Measurement of Life Satisfaction. Journal of Gerontology, 16: 134–143.

Peir´o, A. (2006). Happiness, satisfaction and socio-economic conditions: Some international evidence. The Journal of Socio-Economics, 35(2), 348-365.

Peterson, C., Park, N., & Seligman, M. E. P. (2006). Greater strengths of character and recovery from illness. Journal of Positive Psychology, 1, 17–26.

Rojas, M. (2007). Heterogeneity in the relationship between income and happiness: A conceptual-referent-theory explanation. Journal of Economic Psychology, 28 (1), 1-14.

Sarracino, F. (2013). Determinants of subjective well-being in high and low income countries: Do happiness equations differ across countries? The Journal of Socio-Economics, Volume 42, February 2013, Pages 51-66.

Sirgy, M. J., Reilly, N. P., Wu, J., & Efraty, D. (2008). A work-life identity model of well-being: Towards a research agenda linking quality-of-work-life (QWL) programs with quality of life (QOL). Applied Research in Quality of Life, 3, 181-202.

Sirgy, M.J. (1991). Can business and government help enhance the quality of life of workers and consumers? Journal of Business Research, Volume 23(1), Issue 1, August 1991, Pages, 1-7.

Sloane, P. J. & Williams, H. (2000). Job satisfaction, comparison earnings, and gender. Labour, 14, 473-502.

Spector, P., Tammy, Allen, T., Poelmans, S., Lapierre, L., Cooper, C., O' Driscoll, M., Sanchez, J., abaca, N., Alexandrova, M., Beham, P., Brough, P., Ferreiro, P., Fraile, G., Lu, C., Lu, L., Moreno-Vela'zquez, I., & Pagon, M. (2007). Cross-national differences in relationships of work demands, job satisfaction, turnover intentions with work-family conflict. Personnel Psychology, 60(4), 805-835.

Stevenson, B., & Wolfers, J. (2009). The paradox of declining female happiness. American Economic Journal: Economic Policy, 1, 190can E

Veenhoven, R. (2000). The four qualities of life: Ordering concepts and measures of the good life. Journal of Happiness Studies, 1, 1-39.

Veenhoven, R. (2012a). Cross-national differences in happiness: Cultural measurement bias or effect of culture? International Journal of Wellbeing, 2(4), 333-353. doi:10.5502/ijw.v2.i4.4)

Veenhoven, R. (2012b). Average happiness in 149 nations 2000–2009: How much people enjoy their life-as-a-whole on scale 0 to 10. World database of happiness. Erasmus University Rotterdam, Netherlands. http://worlddatabaseofhappiness.eur.nl/hap_nat/findingreports/RankReport_AverageHappiness.php

Veenhoven, R. (2012c). Trend average happiness in nations 1946-2010: How much people like the life they live. World database of happiness. Erasmus University Rotterdam, Netherlands. http://worlddatabaseofhappiness.eur.nl/hap_nat/findingreports/TrendReport_AverageHappiness.pdf

Abstract (in Japanese)

要約

本研究は、タイにおける家族、健康、職業に対する満足度と幸福度との関連性について調査を行ったものである。分析データは国際協力機構（JICA）の実施した電話アンケート調査に基づいて収集された。具体的にはタイ国立開発行政大学院（NIDA）世論調査の 2012 年の標本からタイ各地域の人口、年齢、世帯収入に比例する形で単純無作為抽出および層化任意抽出したものである。同データには計 1,004 人の回答があったが、本研究では対象を就労者に絞り、計 799 人分の回答のみを使用した。仮説検証には階層的回帰分析の手法を用いて検証し、さらに人口統計学的要因に関連するいくつかの興味深い問題の検証には分散分析の手法を用いた。分析結果からはタイにおいては 3 つの満足度（すなわち家族、健康および職業に対する満足度）すべてが幸福度に対して正の相関を示した。ここでの「幸福度」とは現在と将来の 2 つの幸福度であるが、中でも将来の幸福度については、家族満足度のみが正の相関だった。現在の幸福度については 3 つの満足度すべてが正の相関を示した。また、3 つの満足度の変数のうち、家族満足度が現在および将来の幸福度を予測するうえで最も重要な役割を果たしていた。さらに、本研究結果からは性差が変数としてはほとんど影響を及ぼさないことが示された。本研究結果は、他国における研究結果の妥当性を立証するだけでなく、政策立案者にとって生活や幸福に関する個人の主観的評価が重要であることをも立証するものである。