# Lok Sang Ho Department of Economics Lingnan University

## The "Three Happinesses" and the "Happiness Formula": Lessons from the Hong Kong Evidence

#### **Abstract**

The paper draws on results of surveys conducted in Hong Kong since 2005 to test the "three happinesses theory" and the "happiness formula." The "three happinesses theory" suggests that the positive or negative feelings as well as the strengths of such affective feelings associated with an activity would depend on the "state of mind" of the individual engaging in the activity, and this would depend on prospective as well as retrospective considerations. The "three happinesses" are based on a "whole life experience," the capability for which can be "switched on" using the happiness formula consisting of Love, Insight, Fortitude, and Engagement.

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#### 1. Introduction

Ho (2006) proposed that there are three kinds of happiness: retrospective happiness, happiness in process, and prospective happiness. Retrospective happiness refers to the state of happiness of a person as he ponders his past: he may be satisfied with his past endeavors, or cherish the sweet moments that he had spent with his loved ones; or he may be still hurting from past traumas, grievances, or regrets. Happiness in process refers to the happiness as a person is engulfed in what he is doing. An artist may be enjoying his artistry; a musician may be enjoying his playing of a great piece; a singer may be enjoying his singing. One can also be simply "enjoying life", or enjoying family life or the company of people around him. On the other hand he may be suffering from an ailment, or the agony of some unpleasant experience. Prospective happiness refers to the happiness experienced by a person as he looks forward to the things that are about to happen. A couple about to be married may cherish the prospect of raising a family; a scientist may cherish the prospect of a major discovery. Despite the different descriptions, paradoxically perhaps, all three kinds of happiness are experienced at the moment and are therefore realized on the spot. For example, anxiety about the future as well as remorse gives rise to unhappiness NOW. Similarly, satisfaction about one's past achievements or the expectation of an achievement gives rise to happiness NOW. The immediacy of the retrospective or prospective happiness or unhappiness is no different from that caused by an experience that is going on.

While the theory of three happinesses was developed independently, the idea that happiness is not limited to the joy or pain of an activity is not new to psychologists. For example, Seligman (2002) has a chapter on Satisfaction about the Past, a chapter on Optimism about the Future, and a chapter on Happiness in the Present.

Empirically, there is evidence about a U-shaped profile of well-being through life. This result would appear to be difficult to explain, since health typically declines with age, and health is known to be closely related to happiness. The U-shaped profile of well-being can be explained with the theory of "three happinesses."

The theory of three happinesses underscores the wholeness of life and the need to look at life with a holistic perspective. This holistic perspective, unfortunately, appears to be rather rare among younger people. As one passes from adolescence to adulthood—a phase of life likened to "the shadow line" by Joseph Conrad—it is common to find younger people becoming less happy compared to their childhood days, as they grow wary about the future while often overly concerned about short term outcomes, such as examination results. Many older people, having gone through life, in contrast, are able to see life from a broader perspective, and are therefore happier.

The Three Happinesses Approach stands in sharp contrast to the "Time Accounting"

approach which Alan Krueger et.al. are making popular (Krueger et.al., 2008). Under that approach, randomly selected respondents are asked about how they spend their time and how much they enjoy the time spent on each activity each day. In particular, respondents are asked to rate the intensity of the feeling from an activity on a scale from 0 to 6, considering in turn such feelings as pain, happy, tired, stressed, sad, and interested. Using this approach, the authors proposed a new "National Time Accounting" to measure the "features of society's subjective well-being, based on time allocation and affective experience." The authors also constructed a "U-index" to indicate the degree of "unpleasantness" of a process. An episode is classified as "unpleasant if the most intense feeling reported for that episode is a negative one."(Krueger, et.al., National Time Accounting: the Currency of Life, 2009) The approach is reminiscent of the "felicific calculus" of Jeremy Bentham, who considers happiness as summarized by the difference between total pleasures and total pain. While the three happinesses approach appears to be in discord with the time accounting approach in that the latter appears to focus just on happiness from an ongoing activity, it need not be. Conceptually, it is possible that prospective and retrospective happinesses are embodied in the time accounting approach. example, if one is still hurting from an unpleasant experience in the past, one may not enjoy an ongoing activity so much. Similarly, if one is very much worried about one's future one may not be in the mind to enjoy a movie or a concert. In other words one's disposition about an ongoing activity may be affected by "retrospective" and "prospective" considerations. From this perspective, averaging the feelings reported for any specific activity among respondents and taking the averaged evaluation of an activity as indicating the intrinsic nature of that activity would be misleading, because the state of mind of the individual matters a lot.

While the three happinesses approach can be reconciled with the time accounting approach, the former is useful in that it throws light on the nature of one's preoccupation and the need to free oneself from such preoccupations. For example, this approach throws light on the role of forgiveness in overcoming retrospective unhappiness and the role of hope and social safety nets in overcoming prospective unhappiness.

In the next section we will relate life goals to the three happinesses, offering an explanation why intrinsic goals are more conducive to happiness than extrinsic goals. Section 3 presents empirical results testing the three happinesses hypothesis. Section 4 will discuss "the happiness formula", a recipe for happiness that is based on the teachings of the world's great religions and the insight from positive psychology. Section 5 digresses to a discussion of the effects income and education on happiness. Our regression results suggest that unhappiness is associated with low income but that

high income people nevertheless are often prone to unhappiness. Moreover, it is discovered that after controlling for the effects of income, higher education does not appear to bring more happiness. Finally, Section 6 presents the conclusions.

Table 1: Life Goals and Happiness: Regression Analysis 2006 and 2007 (Happiness Index Based on 0-10 Scale)

**Year 2006** 

<b>Explanatory Variables (life goals)</b>			s): Coefficient	t statistic
Constant			43.36	15.58***
Enjoying Ti	me with th	e Family	1.279	4.35***
Making Mo	ney		-0.518	-1.87*
Career Achi	ievement		0.035	0.13
Inner Peace			0.443	1.71*
Satisfied	with	one's	financial2.782	11.32***
situation(co	ntrol)			

Note: the explanatory variables are each rated on a [0, 10] scale.

**Year 2007** 

<b>Explanatory Variables (life goals):</b>			: Coefficient	t statistic
Constant			26.68	8.27***
Enjoying Ti	me with the	e Family	0.691	2.012**
Making Mo	ney		0.434	1.325
Career Achi	evement		0.321	1.01
Inner Peace			0.332	1.104
Satisfied	with	one's	financial4.39	14.14***
situation(co	ntrol)			

<sup>\* &</sup>amp; \*\*\* indicate 10% & 1% statistical significance.

## 2. Life Goals and the Three Happinesses

Empirically, surveys conducted by the Lingnan Institute for Humanities and Social Sciences since 2005 have confirmed the importance of the nature of life goals in determining one's happiness, which has been reported in a number of studies.(Kasser

& Ryan, 1993, 1996, 2001) Excessive concern over financial success, which is an "extrinsic life goal," is often associated with less happiness. **Table 1**, which presents the regression results when the happiness index is regressed against life goals from two surveys (2006 and 2007), and which controls the effects of financial health of the households, shows that valuing money was associated with more unhappiness in 2006, even though valuing money and financial success appears to have more positive effects on happiness in 2007. 2007 was a year of wild upward swing in the Hang Seng Index, with the index surging from around 20,000 at the beginning of the year to over 31,000 in November of the year. It is not surprising that respondents who tasted financial success reported higher happiness momentarily. But extrinsic achievements such as "financial success" are elusive. Not only is it often relative but it is also much more transient. With financial success held as the life goal, it is also likely that one is frustrated and angry with one's lack of financial success or decline in personal fortunes in the past, thus reducing retrospective happiness. Indeed in the 2008 Survey, which was conducted after the breakout of the financial tsunami, it is found that over 12% of the respondents with monthly incomes at or over \$40,000 described themselves as unhappy. This is likely to be associated with capital losses on account of the financial tsunami. On the other hand, if one values

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<sup>&</sup>lt;sup>1</sup> Without this control, it is possible that those who are under financial stress and are therefore unhappy report that money is the most important thing in their lives but do so only because they are under financial stress.

one's relations with one's family members more and financial success less, one is more likely to enjoy the satisfaction that comes along with loving and caring for others.

The three happinesses perspective suggests that, the painful effort made in the past may be the prelude to the sense of achievement that is the source of much joy as one looks back (a "retrospective happiness"). Similarly, the prospect of sweet success reduces the pain of the effort made today. When one takes a broader perspective and sees life in its entirety, one may see purpose and usefulness of an unpleasant experience and even a mistake. One may then learn from the mistake, become stronger, know of love and compassion, and grow into a happier person. This is the basis of the intrinsic achievement that stands in sharp contrast to the extrinsic achievements as discussed in the literature.

Thus, the three happinesses perspective allows one to take on a more positive attitude toward life even during times of adversity and greater prudence during times of apparent success. Evidence that one's attitude plays a major role in determining if one is happy has significant implications for public policy. Policies and institutions that foster a "pro-happiness attitude and perspective" can be more effective and cost-effective than those that promote economic growth or consumption in enhancing happiness. In this light economic growth is only a means to achieve a higher goal

and not the final objective of human activities, and that if education or cultural policy can nurture a pro-happiness attitude and perspective, it is possible that some sacrifice in terms of economic growth may be worthwhile if happiness can be increased.

**Table 2: "Three Happinesses" Regression (2008)** 

Independent Variables: Happiness Index	Coefficient	t statistic
Constant	0.980	4.047***
Prospective Happiness	0.206	5.632***
Happiness in Process	0.219	6.184***
Retrospective Happiness	0.435	10.388***

<sup>\*\*\*</sup> signals statistical significance at 1% level.

## 3. Three Happinesses: An Empirical Test

Based on a survey conducted over the period October 20-24 2008, which used the random-digit-dialing phone interview method and which successfully interviewed 823 Hong Kong residents aged 21 or above, we found that the happiness score is directly related to the variables that are designed to capture prospective happiness, happiness in process, and retrospective happiness (**Table 2**):

The variables that proxy the "three happinesses" are defined as averages of values on an eleven point scale from 0 to 10 when respondents are asked if they agree to three groups of questions. 10 indicates "strongly agree" and 0 indicates "strongly disagree." The measures are explained as follows:

## Prospective happiness:

- I meet each day with excitement and joy
- I do not usually worry about the future
- I expect to continue to learn more things in the rest of my life

## Happiness in process:

- I enjoy my work/housework.
- I enjoy my time with my family

## Retrospective happiness:

- I am pleased with how I have conducted my life
- Life has been kind to me
- I have grown wiser because I am able to learn from my mistakes.

The responses under each of these "happiness" measures are averaged to form the explanatory variable. For the dependent variable, again we use an 11 point scale for

the question: "Taking everything into consideration, do you consider yourself happy or unhappy?" According to the regression results, for someone who answers 10 to each of the questions above, the happiness index is 0.98+2.06+2.19+4.35=9.58

Of the three happinesses, it turns out that retrospective happiness is the most important. But we also have discovered that the relative importance of the three happinesses changes systematically over time. These results are obtained when we perform regressions on sub-samples of age groups. For those in their twenties, we discover that prospective happiness is the most important. Going into the thirties and forties, retrospective happiness becomes more significant and more important. Then going beyond 50, happiness in process becomes more important, while prospective happiness is no longer important or significant. (**Table 3**)

**Table 3: Three Happinesses by Age Groups** 

Age Group	21-29	30-49	50 or above
Prospective Happiness	0.358	0.249	0.113
	(3.913)***	(5.223)***	(1.544)
Happiness in Process	0.310	0.153	0.246
	(3.809)***	(3.370)***	(3.184)***
Retrospective Happiness	0.204	0.511	0.410
	(2.257)**	(9.547)***	(4.635)***

<sup>\*\*\*</sup> signals statistical significance at 1% level.

## 3.1 Prospective happiness

The Lingnan happiness surveys first started in 2005, and have been conducted once every year since then. In 2007, however, we also did a year-end survey in addition to the normal survey. In 2005, 2006 and 2007, it was discovered that reliable and affordable healthcare is considered very important for happiness, with a score of between 7.7 and 7.8 on a scale of [0-10], while securing a post-retirement life is also listed among the main concerns, with a score of 5.14. Of special interest is the fact that 11.2% of people are extremely worried about the erosion of the rule of law, indicating how important the rule of law is in the minds of Hong Kong people and that people sense a distinct risk of its erosion. In contrast, only 6.6% of the respondents say that they are extremely worried about Hong Kong being not democratic enough. This result appears to be intriguing, given that Hong Kong's political system is generally regarded as undemocratic, particularly in view of the finding, by Frey and Stutzer (2001) that democratic institutions add to happiness significantly. The result suggests that the rule of law is most important for prospective happiness as it is far more effective in terms of protecting people's rights and guarding against the abuse of power than electoral democracy. (Di Tella, et.al., 2001, Ng and Ho, 2006)

Table 4: Determinants of Happiness (Based on 2005 Survey)

	Coefficient	Probability Value
Constant	65.59	0.000***
Young	-1.64	0.414
Old	6.76	0.015**
Female	2.17	0.097*
Good Health	5.32	0.000***
Spiritual Practice(Yes)	6.66	0.000***
Married	3.64	0.025**
Low Income Household	-10.38	0.000***
Primary Education * Low	8.77	0.019**
Household Income		
Tertiary Education * Low	1.98	0.736
Household Income		

<sup>\*</sup> Significant at 10% level

## 3.2 Happiness in Process

By "happiness in process" is meant the general feeling of well being that arises from the qualities of an ongoing event or state. A person in poor health ("poor health" in **Table 4**), a person in poverty ("low income"), or a person suffering from loneliness (divorced or widowed), for example, suffers because of an ongoing situation. Among the indicators of happiness or unhappiness in process in the Hong Kong surveys are "worry about health of oneself or that of one's family", "unemployment," "relationships within the family", "income not meeting needs," etc. These sources of unhappiness have to do with an *ongoing state*, for example unemployment now and

<sup>\*\*</sup> Significant at 5% level

<sup>\*\*\*</sup> Significant at 1% level.

the state of health now,<sup>2</sup> rather than a risk of encountering some undesirable event or state in the future **Table 4** summarizes the results of a regression analysis based on the 2005 survey. It shows, among other things, that those who perceive of themselves as enjoying good health are significantly happier than those in poor health or the reference group, and being married is a significant boost to happiness compared to not being married or widowed. Low income is also a source of unhappiness. Health brings happiness not only because it directly brings a feeling of wellness but also because it is an input in many social and consumption activities. The marriage premium on happiness is well known, and it may have to do with the benefits of having a long time companion to share the joys and chores of life—an ongoing process, though marriage also changes people's expectations and thus may affect prospective happiness too. Excessively low income is always a source of unhappiness. But the statistical findings confirm the frequently cited observation that a higher income does not always bring higher happiness.

These results are more or less repeated for the regression based on the 2006 survey (**Table 5**). The "good health happiness premium" remains strong in 2006. Introducing finer categories of income in 2006, we may note that while low income people are generally less happy, a monthly household income over \$40,000, which is roughly 2.5 times median household income in Hong Kong, actually carries a

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<sup>&</sup>lt;sup>2</sup> YK Ng correctly pointed out that there are prospective aspects to these worries.

non-significant negative coefficient. This confirms a commonly reported result in the literature (e.g. Easterlin, 2001).

**Table 5: Determinants of Happiness (2006 Survey)** 

	Coefficient	Probability Value
Constant	67.584	0.000***
Young	2.175	0.325
Old	8.910	0.009***
Female	2.680	0.064*
Married	1.003	0.601
Spiritual Practice	2.702	0.112
Good Health	4.752	0.001***
Low Household Income (below \$9999)	-4.335	0.069*
Second Low Household Income	-5.696	0.002***
(10000-19999)		
High Household Income (40000 or above)	-0.411	0.834
Primary Education * unemployed	32.109	0.004***
Tertiary Education * unemployed	-9.316	0.157
Primary Education * Working Population	2.497	0.372
Tertiary Education * Working Population	-1.544	0.383
Primary Education * Old Age	-10.763	0.026**

<sup>\*</sup> Significant at 10% level

Given that as much as 22.3 % of the respondents indicate that they are extremely worried either about their own health or about the health of their family members, any loss of health must be regarded as a significant factor that directly impinges on people's happiness. Moreover, it is also significant that, similar to what is revealed in other studies, in Hong Kong unemployed people are unhappy, not only because of

<sup>\*\*</sup> Significant at 5% level

<sup>\*\*\*</sup> Significant at 1% level.

the loss of income but apparently because it is an unpleasant experience. Because of the clear and significant effect of unemployment and lack of health on happiness, devoting more resources to deal with these worries would seem to be well justified. The spiritual practice variable shows varying results in the two surveys. In 2005 those regularly engaged in some form of spiritual practice were happier. In 2006 these effects were much reduced. By spiritual practice is meant praying, meditating, Since "spiritual practice" in the survey refers to the going to church or temple, etc. physical act and we could not distinguish those who are earnest in the spiritual practice from those who go to church as a routine or for social purposes, this result is not surprising. In particular, if more of the respondents sampled go to church for social or non-spiritual reasons in 2006 than in 2005, 3 then it is quite possible that the statistical effect diminishes. The results may also signal a decline in genuine spiritual practice among those who report the act. More exploration into the phenomenon will be appropriate.

Among the various industries, those employed in the health care sector appear to be the most unhappy. This appears to relate to the fact that healthcare is a very stressful job, and employees have also to deal with sick people and so are more likely to be immediately influenced by the sight of suffering. This is in the nature of happiness

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<sup>&</sup>lt;sup>3</sup> A well known reason is to gain "points" to facilitate admission to schools with religious denominations.

in process. Those who work in the government or in the public sector other than health care or education appear to be the happiest. Notwithstanding the complaints that are heard from time to time about stress in this sector, it appears that if there are stressful situations they tend to be more than offset by other compensating factors.

## 3.3 Retrospective Happiness

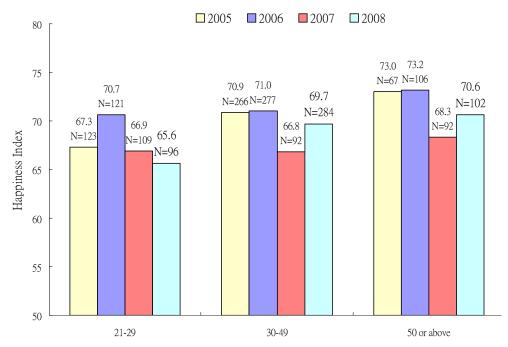


Figure 1: Happiness Index by Age (Working Population Only)

We had referred to the U-shaped profile of happiness through life that has been documented in the literature<sup>4</sup> but our surveys suggest that happiness grows with age. An explanation is that our surveys ignored those under 21. Thus **Figure 1** shows happiness rising with age among the working population at or over 21. Given that health typically declines with age and that happiness is thought to be positively

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<sup>&</sup>lt;sup>4</sup> See "Is Well-being U-Shaped over the Life Cycle?" (NBER Working Paper No.<u>12935</u>), Blanchflower and Oswald. Our surveys exclude those below 21, and may for this reason not show up a U-shaped happiness profile.

related to health, this result would seem surprising. However, if "retrospective happiness" is an important component in one's overall happiness this would be much less surprising. When an older person gains confidence and satisfaction about having gone through what he did, he becomes more satisfied and happier. Younger people, on the other hand, generally tend to be wary of the future, but if in the end they get through their problems they will gain maturity and become happier.

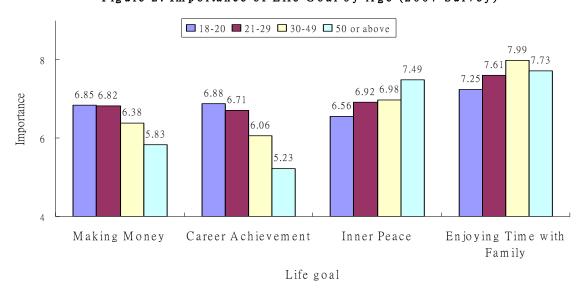


Figure 2: Importance of Life Goal by Age (2007 Survey)

Another interesting finding from our surveys is that the life goal typically changes over one's life cycle. Earning a high income or having some achievement in one's career becomes no longer so important as one gets older. On the other hand, inner peace and spending time with the family becomes more and more important (see **Figure 2**).

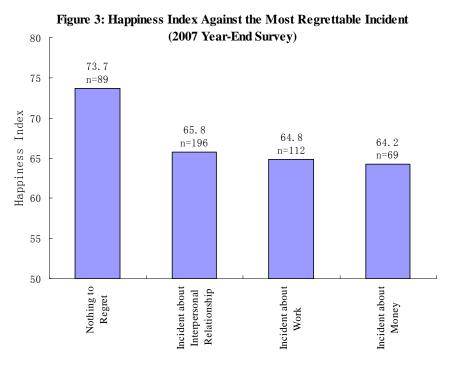


Figure 4: What Kind of Event is the Most Regrettable? (2007 Year-End Survey)

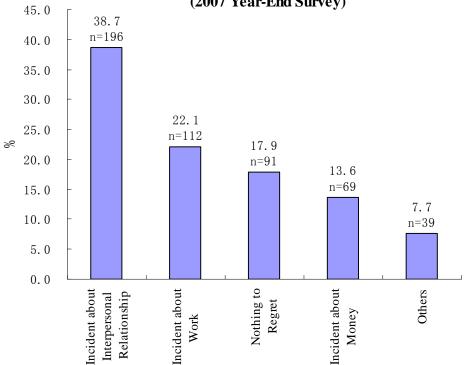
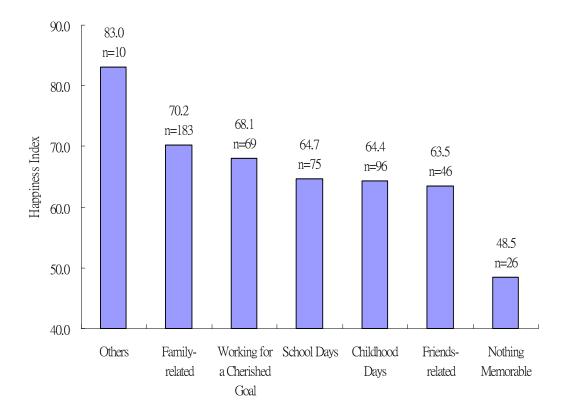


Figure 5: What Kind of Memories Do You Cherish the Most? (2007 Year-End Survey) 36.0 40.0 n=183 35.0 30.0 25.0 19.1 n=97 ≈ 20.0 14.8 13.8 n=75 n=7015.0 9.1 n=46 10.0 5.1 n = 262.2 5.0 n=110.0 Working for a Cherished Goal Nothing Memorable Family-related Friends-related Childhood School Days Others Days

Figure 6: Happiness Index against the Memory Cherished Most (2007 Year-End Survey)



The year-end survey conducted in 2007 found that the happiness indices for those who reported nothing to regret in their lives to be significantly higher than those who reported having some regret, with the happiness score standing at 73.7 for the "no regrets" versus 64.2 to 65.8 for those with regrets). See Figure 3-6. On the other hand those who cherish memories related to the family were the happiest. Those who found no memory to cherish were the least happy.<sup>5</sup>

#### 4. The Happiness Formula

In the literature (e.g., Seligman, 2002) the following "Happiness Formula" is often discussed:

$$H = S + C + V$$

where H is the "enduring level of happiness," S is the "set range"— a genetically related component that represents the level of happiness toward which any deviation tends to regress after some time, C is circumstances, and V represents voluntary elements. There is little doubt that hereditary factors matter in happiness, but this representation may nevertheless be misleading if it is construed of as suggesting that S accounts for, say, X percent of the happiness index. There have been many reports

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<sup>&</sup>lt;sup>5</sup> Actually the highest happiness score are for "other" memories not listed in the questionnaire but "others" is a mixed bag and contains only a few cases.

of unhappy individuals turning around to become happy through a change in attitude.<sup>6</sup> Thus, the challenge for an individual is to "switch on" the happiness capability. While for some people it may be more difficult to "switch on" the happiness capability because of genetic factors, once this is switched "on," the individual becomes happy. In a substantive sense then happiness can be learned. Accordingly an alternative "Happiness Formula" is proposed as Happiness = L + I + F + E. L refers to Love. I is Insight or wisdom. F is Fortitude. E is Engagement. This "happiness formula" in part is based on the teachings of various religions. For example, Buddhism preaches loving kindness and wisdom, which closely mirrors the Christian teaching about loving one's neighbor and loving God. In part it is based on the lessons from positive psychology, which emphasizes the need for a sense of purpose and self-actualization (Maslow), and which also explicitly cites fortitude as a force to overcome unhappiness (Mark Zimmerman).

<sup>&</sup>lt;sup>6</sup> For some stories "How to be happy again: Finding love, joy and peace of mind after a devastating loss" <a href="http://www.msnbc.msn.com/id/22186226//">http://www.msnbc.msn.com/id/22186226//</a>

**Table 6: Regression Analysis of the Happiness Formula** 

Dependent Variable: Happiness Index (Scale of 0 to 10)

Independent Variable	Coefficient	t statistic
Constant	1.491	4.100***
Love (0-10)	0.146	2.696***
<b>Insight</b> (0-10)	0.174	3.685***
Fortitude(0-10)	0.087	1.930*
Engagement(0-10)	0.368	8.931***
Housewife (1 or 0)	0.300	1.497
Unemployed (1 or 0)	-0.343	-0.753
Financial stress (1 or 0)	-0.778	-4.069***
Female (1 or 0)	0.039	0.276
Married (1 or 0)	0.294	1.918*
Retiree (1 or 0)	0.149	0.517
<9,999 Household Income	-0.178	-0.849
40,000+ Household Income	-0.088	-0.593

<sup>\* &</sup>amp; \*\*\* indicate statistical significance at 10% & 1% respectively.

This Happiness Formula was tested in the 2008 Lingnan University survey of happiness. In this regression, we tried to control the characteristics of the householder including sex, marriage status, employment status, and household income, while the responses to four groups of questions are summarized as indicators of Love, Insight, Fortitude, and Engagement. It is found that three of these four key factors carry a highly significant coefficient (at 1% level). The only exception is Fortitude, which is significant only at the 10% level. The variables Love, Insight, Fortitude, and Engagement are based on questions whose answers are defined by an 11-point scale. 0 indicates strongly disagree and 10 indicates strongly agree.

#### Measures of Love

- I very much care for my family
- I very much care about social justice
- My family very much cares for me

## Measures of Insight

- I am not worried about falling behind others.
- I do not care about how others treat me.
- I do not care about how others think of me
- I am comfortable with myself and will not be troubled by my inadequacies.
- I feel fine as long as I have met my essential needs.

#### Measures of Fortitude

- Failures only strengthen me.
- I have clear and strong convictions.

## Measures of Engagement

- I have ample opportunity and am taking these opportunities to develop my potential.
- I have clearly identified goals and purposes in life.

For someone with a score of 10 for each of the key variables, ignoring the control variables, the happiness index would be 9.241 out of 10. Of the key four factors,

engagement carries the biggest coefficient and is also the most significant, underscoring the importance of a sense of purpose and living passionately. In contrast, the coefficient for Fortitude, while still significant, is relatively small. However, while Fortitude may not appear to be important when everything is going well, during times of crises it may prove very important, and Fortitude is what it takes for one to survive a major setback in life.

**Table 7: Happiness in Relation to Education and Income (2008)** 

	Lower Personal Income	Higher Personal Income	Overall
Primary or below	67.93	72.00	68.1
Secondary	68.94	75.87	69.8
Post-secondary	65.81	70.95	68.2

Low personal income defined as monthly salary  $\leq$  HK\$19,999.

#### 5. Effects of Income and Education

Education is usually believed to enhance happiness. But the evidence from Hong Kong indicates otherwise. As **Table 7**, which is based on the 2008 survey, indicates, once the effects of higher income, which is usually associated with higher levels of education, have been controlled, postsecondary education does not enhance happiness. A similar result is also obtained in earlier surveys. For example, in 2006, once income is controlled, for both the working population as well as for the unemployed, unhappiness appears to be

associated with more education, though the effects are not significant. (Table 5) In 2005, we also find that among the low income group, those with primary education were happier than those with tertiary education. The negative effect of higher education on happiness may reflect the effect of higher expectations among the better educated not being realized. It may also suggest that the kind of tertiary education provided in Hong Kong today has failed to nurture a pro-happiness attitude or prepare people to face adverse situations. On the other hand, it is remarkable that for the old age group, the primary education dummy carries a negative and statistically significant coefficient, suggesting that for the older cohorts, education may bring happiness (Table 5). It is not clear if this has to do with the kind of education that they had gone through, or if this has to do with the greater wealth of the better educated (we could not control for the effects of wealth, but we expect that the better educated would have higher earnings before retirement and consequently would likely enjoy more wealth).

**Table 8: Unhappy Respondents by Personal Income** (2008 Survey)

Personal Income	Unhappy	All Reporting	% of Unhappy Respondents
	Respondents	Respondents	
Below \$9999	33	363	9.1%
\$10000 - \$19999	17	180	9.4%
\$20000 - \$39999	4	112	3.6%
\$40000 or above	7	55	12.7%
Total	61	710	8.6%

However, the effects of income or wealth on happiness is not monotonically increasing. As indicated in **Table 8**, the percentage of unhappy respondents, at 12.7%, is actually higher for the \$40,000 + monthly income groups than for any of the lower income groups. The fact that higher income may not raise happiness beyond a certain point is well known in the literature, and is also confirmed in the regression reported in **Table 5**.

#### 6. Conclusions

The survey studies that we have conducted since 2005 in Hong Kong have lent support to the hypothesis about the happiness formula and the three happinesses. Although scientists generally agree that genes play a key role in determining many of the traits that affect personality and moods, whether one is happy is not cast in stone. To a large extent, happiness relates to an attitude toward life that can be learnt or acquired at the individual level. At the same time, happiness also relates to institutions and arrangements that fall under the purview of government policies. For one thing, nurturing a caring and a tolerant society that respects each person as an individual helps foster love and a "pro-happiness culture." For another thing, constructing a social safety net that reduces the worries of the people who may be exposed to the threat of unemployment and hefty healthcare costs, and upholding the

rule of law to prevent the abuse of rights by the state or by anyone with power and influence will certainly enhance prospective happiness.

The reversal in the effects of education on happiness for the younger cohorts is an astonishing finding and deserves further investigation. The inability of higher education today to raise the happiness of people seems quite clear and deserves our attention. Notwithstanding the espoused goal of "whole person education" that most universities today have set for themselves, the reality is that graduates from today's universities do not find their life "more whole" than those without the opportunity to attend universities.

Pro-happiness culture is a culture of taking pride in tackling challenges, a mental readiness to face difficulties, a willingness to take short term setbacks not as a disgrace and a defeat but as a valuable experience to enrich life and to instruct. Pro-happiness culture is a culture against conspicuous consumption and flaunting one's achievements. Pro-happiness culture is a culture of humility and humanism. It is a culture of personal development and spiritual growth. Both education and religions can promote such a culture.

An effective government that serves the people well is one that reduces people' worries about health and health care expenditures, about reducing unemployment (Di Tella *et.al.*, 2001) and the financial cost of bringing up children, about maintaining

law and order and implementing an effective and adequate safety net for the unfortunate. In democracies, the extent to which the government can do this also depends on the culture of the people and that of the politicians. A pro-growth culture rather than a pro-happiness culture, or a pro-profit culture rather than a pro-life culture, a culture of taking means for ends rather than a culture of seeing improving the quality of the human life as the single legitimate ends, can render a government ineffective and counter-productive, with dire consequences. This is becoming all too clear in the wake of the financial market tsunami. Governments, therefore, have a clear role in cultural policy. In view of an apparent failure of formal education to enhance happiness, there appears a need to shape up education to nurture a pro-happiness culture and attitude (Ng, 2002, Ng and Ho, 2006).

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