

Data Analysis of the AsiaBarometer Survey: The Culture of Happiness and Satisfaction in Asia

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Introduction

The issues that I address in this chapter are methodological, and they are examined using data from the cross-national AsiaBarometer Survey. Professor Takashi Inoguchi of the University of Tokyo (now at Chuo University) first conducted this questionnaire survey in 2003. The second survey was conducted in 2004. In this chapter, I examine those survey questions that are designed to measure the level of happiness and satisfaction of people in different Asian countries, and I attempt to analyze the data from several theoretical perspectives.

I would like to comment on two points before beginning my analysis. The first is regarding the characteristics of the AsiaBarometer Survey, with particular emphasis on its aim, scope, and strength. For details, see Inoguchi's co-edited volume, *Values and Life Styles in Urban Asia: A Cross-Cultural Analysis and Sourcebook Based on the AsiaBarometer Survey of 2003* and my article, *Data Analysis of the AsiaBarometer Survey: Methodological Discussions and Exploratory Data Analysis* (2005). Here I simply point out that the AsiaBarometer Survey is a cross-national survey with the following three characteristics:

- (1) It is a fixed point/fixed period questionnaire survey that covers the entire Asian

region.

(2) It is a time series survey that will be conducted over 10 years starting in 2003.

(3) It combines the characteristics of a general social survey, which focuses on various aspects of the everyday life of people, with the characteristics of a political culture survey, which also strives to measure the political behaviors of people as well as their values and norms regarding freedom, human rights, regulations, and democracy.

The second point is to note the approach taken to the data analysis, that is, to note the aims, goals, and direction of the data analysis. Large-scale, cross-national questionnaire surveys have been conducted in numerous countries in recent years. Two such excellent surveys include the World Values Survey (WVS) and the International Social Survey Programme (ISSP). Data from cross-national surveys are being accumulated and efforts are being made to develop environments in which they can be used, that is, to establish and develop data archives such as the Central Archive for Empirical Social Research (ZA) at the University of Cologne in Germany and the Inter-University Consortium for Political and Social Research (ICPSR) at the University of Michigan in the United States. These achievements are leading to the organization of efforts to conduct secondary analyses on survey data at the international level. One example of such an effort is the International Conference on Large-Scale Data Analysis that was held at the University of Cologne in Germany on May 25–28, 1999. At this international conference, researchers reported on their efforts to use and conduct secondary analyses from a variety of perspectives on diverse survey data obtained by the ISSP between 1985 and 1995 (I gave

a presentation entitled “The Structure of National Identity,” which was based on my efforts to conduct secondary analyses), and these can be categorized as follows:

- (1) examination of theoretical hypotheses in the social sciences
- (2) exploratory data analysis
- (3) construction of statistical models
- (4) development of analytical methods
- (5) refinement of database methodology
- (6) search for equivalence
- (7) and the investigation of technical problems with non-responses and missing data

Many efforts to analyze and use cross-national survey data are being undertaken. The data analysis to be conducted in this chapter can generally be characterized as three of the above categories (1) the examination of theoretical hypotheses (point 1 in the above categories); (2) the development of analytical methods (point 4 in the above categories); and (3) the search for equivalence (point 6 in the above categories). To clarify this point further, the next section discusses my specific area of interest, “the culture of happiness and satisfaction in Asia.”

Motivation Underlying This Data Analysis

My interest in conducting this data analysis is to examine what can be simply expressed as “the culture of happiness and satisfaction in Asia.” This actually covers two of my areas of interest, “happiness and satisfaction,” and “Asia.” These are discussed below.

Interest in Happiness and Satisfaction

The themes of happiness and satisfaction are extremely relevant in contemporary society. On the one hand, for example, the *Asahi Shinbun* ran a series of special articles entitled “Becoming a Happy Superpower: Choosing the Future” from April to June 2005. The same Japanese newspaper also ran an article entitled “60 Years After the War in Key Words” on August 16, 2005 (p. 13), and the first word listed was “happiness.” Moreover, John Kenneth Galbraith wrote a book entitled *The Culture of Contentment*, and in it he coined unique terms to describe this era and its society based on his acute observations—terms such as “the affluent society,” “domination of the technostucture,” and “the age of uncertainty.” In this book, Galbraith essentially depicts the spread of a feeling of self-satisfaction as the major trend in contemporary society.

Overall, little research has been done in the social sciences on the topic of happiness (or satisfaction). Here I quote two researchers who have addressed this issue, Professor Ruut Veenhoven of Erasmus University in Rotterdam (Netherlands) and Professor Tamotsu Aoki of the National Graduate Institute for Policy Studies in Tokyo (Japan).

- Ruut Veenhoven

Philosophical studies of happiness produced a lot of ideas, but little operational knowledge. In fact, it raised more questions than answers. Many theoretical controversies could not be solved by the logic of reasoning alone; usually, empirical validation was not possible. The advent of the social sciences promised a breakthrough. New methods for empirical research opened the possibility to test theories of happiness and to identify

conditions for happiness inductively. This instigated a lot of research. In the last decades some 3000 empirical studies have considered the matter; in the beginning mainly as a side-issue in studies about health and aging, but currently also as a main subject. This stream of research has not yet crystallized into a sound body of knowledge on happiness. Preliminary questions about conceptualization and measurement are now fairly well solved, but the understanding of processes and conditions involved in determinants and consequences of happiness is still very incomplete and tentative. (2004: 6).

- Tamotsu Aoki

The topic of happiness is difficult to discuss. We lack a good understanding of what happiness means to different people. Modern philosophy, especially twentieth-century philosophy, ignores happiness, and suggests that happiness can be achieved by trying to follow a particular ideology, but does not try to specifically figure out what it is really made of. Instead, it has focused on the politics of oppression. The topic of happiness is also not being discussed in the fields of social theory, scientific theory, or modern thought, nor as a main component of modern age theory or social scientific theory. Thus far, everyone has seen the notion of happiness as a fairly bland topic, but the lack of a careful discussion of happiness may have been one of the major failings of the twentieth century. (2003: 4).

The above quotes suggest that we lack a system of “scientific” knowledge regarding happiness (and satisfaction). It is important, however, to recognize that a few independent theories on the topic do exist, regardless of whether they can be said to constitute a systematic theory.

(1) R. Inglehart

One of the interesting things is that economic development determines happiness levels sharply. There’s a strong correlation between economic development and happiness and well-being generally. What’s really interesting is that we have very strong support for this economic determinist position. Karl Marx would feel good looking at our data, because basically it’s true. Economic development is a very strong predictor of movement on these dimensions. Karl Marx would feel good, but Max Weber was also right. Cultural traditions are remarkably persistent (2003: 81).

(2) A. Sen

Living may be seen as consisting of a set of interested functionings consisting of beings and doings. The relevant functionings can vary from such elementary things as being in good health, adequately nourished and so on to more complex ones such as being happy, having self-respect, taking part in the life of the community, etc. Therefore, quality of life : cannot just be reduced to economic indicators such as GNP, income and so on (1992: 86).

(3) F. M. Andrews and J. P. Robinson

Some measures of happiness have been shown to reflect relatively large amounts of affect, particularly positive affect, but relatively little cognition. In contrast, measures of satisfaction reflect relatively more cognition. Surveys of global subjective well-being often find that older adults show lower levels of happiness than do younger adults, but higher levels of satisfaction (e.g., A. Campbell, P. E. Converse, and W. L. Rodgers, 1976.) Given the cognitive-affective conceptual framework, this suggests that cognitive evaluations of life-as-a-whole may rise with age, while positive affect may decline. Perhaps individuals become somewhat jaded emotionally as they age but increase their level of achievement and/or adjust their aspirations (1991: 62-63).

(4) I. McDowell and C. Newell

Empirical studies have shown that the association between objective and subjective indicators of life quality is often not strong; the mismatch may arise where levels of perceived need rise proportionately to improvements in material conditions. This theme leads to the fascinating political issue of whether to plan social programs on the basis of factual indicators, or on the basis of people's subjective responses (1987: 205).

(5) T. Aoki

There are two types of happiness. The first is "small happiness" and the other is "great happiness." "Small happiness" is the happiness that we all feel in our everyday lives, the feeling we experience when we wake up in an

especially good mood, when we eat a particularly good meal, or when we talk with a close friend. This is the kind of happiness that we consistently experience over time amidst historical and social changes. One could even say that this is generally the kind of happiness we live for. The other type is “great happiness.” “Great happiness” is the “pursuit of the ideal” through such ideologies as socialism, fundamentalist religion, or politically standardized totalitarian despotism. Consider economic development as an example familiar to the Japanese in the postwar period. People lived according to the promise that development was the way to happiness, that is, that working hard today for the country’s future development would lead to a happy life. This had elements of the pursuit of “great happiness,” and was said to be for the sake of the company or the country, but it was not always in the interests of the “small happiness” of the individual or household. (2003: 2).

Thus, the existence of at least this many different theories regarding happiness (and satisfaction) led to my interest in determining whether these theories can be tested using data from the AsiaBarometer Survey.

Interest in Asia

My interest in “happiness and satisfaction” stem from two sources. The first is the increasing relevance of this issue in contemporary society and the second is the lack of theories on the topic, in spite of its increased importance. The two motivations behind my interest in this topic are also the motivations behind my interest in Asia. That is, on the

one hand, Asia is currently attracting attention from all over the world. In the arenas of both economics and culture, the image of a “stagnant Asia” is becoming a notion of the past, and Asia’s presence in world society today is growing. On the other hand, however, from the perspective of academic information in the social sciences, there is an “enormous vacuum in Asia” (T. Inoguchi, 2005). I would like to proceed with a more serious discussion of this latter issue, that is, the specific nature of this “Asian vacuum.”

As mentioned above, large-scale, cross-national questionnaire surveys have been conducted in numerous countries in recent years. Pioneering cross-national surveys like the Eurobarometer and the European Values Studies gave rise to the WVS and the ISSP, and later grew into the Latino Barometer and the Afrobarometer. In spite of this environment, there has been not only an extreme lack of social data covering the entire Asian region, but efforts to conduct these kinds of cross-national surveys have not been organized. It is therefore no exaggeration to say that the AsiaBarometer project was a break-through in attempting to fill the “vacuum in Asia.” “Concepts about Asia have historically been derived from Western perspectives on Asia” (T. Aoki, Sanjun Kan, et al., 2002), but the AsiaBarometer Survey, insofar as it has enabled the dissemination of Asian-oriented academic information, has created the opportunity for concepts about Asia to come directly from that region.

Why is the dissemination of academic information from Asia important? It is undoubtedly important because this kind of scholarly information answers the growing social and academic demand for it. With regard to the former, survey activities and the survey data that they yield can be useful in society today. The Eurobarometer Survey

helped to create greater international understanding between the countries of Europe and helped those countries to develop a European identity that they could adopt when dealing with the outside. The AsiaBarometer Survey is expected to play a similar role in Asia.

Academically speaking, survey data can contribute to human intellectual activity that has become socially acceptable in the name of “academic research” and has been sustained by compulsive and spontaneous motivation, and also contributes to the accumulation of research findings. The dissemination of information from Asia has a positive impact on cross-national survey methodologies.

There have been several discussions of the methodological advantages of cross-national surveys. In this chapter I discuss those that are directly relevant to the topics being addressed here.

(1) Basically, all social science is comparative. Social scientists, sociologists included, seek to formulate generalizations which apply to all human behavior (S. M. Lipset, 1968: 16).

(2) The lamentable fact is that the bulk of our principles, propositions, and laws in sociology are generalizations based upon observations and measurements made in Western, urban, industrial societies. We generalize about the human group, but we study the adult, middle-class, white urban male. Some of what looks like ethnocentrism here may be simply the sin of studying what is most convenient. No matter, the consequences are the same: theories built upon data from samples of inadequate universes (R. W.

Mack, 1969: 53).

(3) One possible methodological advantage of the cross-national surveys is that many of the problems that can be ignored when one is dealing with a single nation must now be faced explicitly. If the meaning of questions varies among the geographical regions or the social strata of a nation, this may receive little consideration (G. A. Almond and S. Verba, 1963: 57).

In applying these observations to our analysis of the current version of the AsiaBarometer, two points can be made.

(1) Although the social sciences strive to formulate general hypotheses regarding social phenomena, many of the observations and studies conducted thus far have focused on European and American societies. Using the AsiaBarometer as an opportunity to shift the focus to Asia creates the potential for the development of new general hypotheses that differ from those developed thus far.

(2) Cross-national surveys have the potential to facilitate cross-national or cross-cultural reexaminations of major concepts in the social sciences and to promote the clarification of concepts based on those reexaminations. The shift of perspective from “Western society” to “Asian society” is a major benefit of the AsiaBarometer.

These developments suggest the following direction for this data analysis. In this article I attempt to reexamine and clarify concepts of happiness and satisfaction by testing theories about these topics using data from the AsiaBarometer Survey.

Testing Theories of Happiness and Satisfaction Based on the AsiaBarometer Survey

In this section I attempt to test the five theories of happiness and satisfaction described above. However, since hypotheses one and two by Inglehart and Sen stand in direct opposition to one another, they can be addressed as a single “determining factor of happiness.” Thus, I conduct the following four types of data analysis.

I. Testing the Determining Factors of Happiness: Correlation Diagram Analysis (second data set of AsiaBarometer Survey)

As mentioned above, Inglehart hypothesizes that “economic growth determines people’s happiness. A strong correlation can be seen between the two.” Sen’s hypothesis, by contrast, is that quality of life, including health and happiness, cannot be reduced just to economic indicators such as GNP and income. These two hypotheses are matters that Rudolf Carnap refers to as “empirical law” (1966). Inglehart supports his hypothesis using data from the WVS along with GNP data provided by the World Bank. His specific procedures and results are presented in “Modernization and Postmodernization: The Changing Relationship between Economic Development, Cultural Change and Political Change,” a paper presented at an international conference on Changing Social and Political Values held as part of the Complutense University 700th Anniversary Program in Madrid, Spain in 1993. The following correlation diagram (scatter diagram) showing the relationship between economic development and subjective well-being represents the condensed results of Inglehart’s analysis.

[Insert Figure 1]

This correlation diagram creates a space for correlating per capita GNP (\$) along the x-axis with the subjective well-being index along the y-axis. Each of the forty countries where the WVS was conducted has been plotted as a point within that space. The per capita GNP (\$) for each country is a fairly easily understood statistic that is taken from the World Bank's *World Development Report 1993*. Some explanation, however, of the operational procedures for creating the subjective well-being index is needed. Inglehart explains this as follows: "The subjective well-being index reflects the average between the percentage of the public in each country who (1) describe themselves as 'very happy' or 'happy,' minus the percentage who describe themselves as 'not very happy' or 'unhappy,' and (2) the percentage placing themselves in the 7–10 range, minus the percentage placing themselves in the 1–4 range, on a 10-point scale on which '1' indicates that the person is strongly dissatisfied with his or her life as a whole, and '10' indicates that the person is highly satisfied with his or her life as a whole."

This correlation diagram is created using data from the second WVS, but the trend confirmed by Inglehart here was repeated in both the third (1995–1998) and fourth (1999–2002) surveys. A crescent moon pattern rising upward to the right can be seen in the relationship between per capita GNP (\$) and the sense of happiness (and satisfaction), and Inglehart concludes from this that economic growth is a determining factor in people's sense of happiness (and satisfaction). At the same time, however, Inglehart carefully focuses on a distinct, smaller trend. That is, some countries like Portugal, South Korea, East Germany, and Japan do not adhere to the basic pattern between the above two variables, and instead appear to be "deviant cases." Inglehart suggests that these "deviant

cases” may be due to the intervention of “cultural factors.” He only cites these, however, to provide an explanation for the “deviant cases” before removing them from the big picture and concluding that “economic growth is a determining factor in happiness (and satisfaction).”

If we turn our attention to the countries of Asia using the data from the AsiaBarometer Survey, what kind of propositions can be made? First the specific procedures to conduct an empirical analysis of a proposition must be outlined. The basic idea behind investigating the relationship between the per capita GNP (\$) of the countries where the AsiaBarometer Survey was conducted and the people’s sense of happiness in those countries using a correlation diagram is basically the same as that used for the WVS, although there are two slight differences.

(1) Whereas Inglehart constructed the subjective well-being index to comprehensively include “happiness” and “(life) satisfaction,” I only use “happiness.” I did this for the following reasons.

- Although the WVS contained general questions about the “life satisfaction” of the respondent, the AsiaBarometer did not ask these kinds of general questions, but instead asked questions regarding specific topics, such as housing, job, marriage, family, income, neighbors, friends, and health.
- If a factor analysis is conducted on the subjective well-being items of the WVS, that is, the questions regarding happiness and satisfaction, “happiness” and “(life) satisfaction” both appear as factor 1 in all of the

seven countries tentatively selected, with the exception of China. This is believed to be a translation issue. In the United States, the key concept was “happy” and in Japan it was “*shiwase*” (happiness), but in China it was “*gaoxing*” (cheerful) a term with a considerably different meaning (Manabe, 2003). By contrast, results of the AsiaBarometer differed significantly by country. “Happiness” emerged as a factor 1 in some countries, but not in others. Also, in some countries, some life satisfaction items emerged as the same factor as “happiness,” whereas in others, other life satisfaction items emerged as the same factor as “happiness.” I discuss this later in the chapter.

For the reasons stated above, I only used the specific question on “happiness,” which was worded as follows:

All things considered, would you say that you are happy these days?

- a. Very happy
- b. Pretty happy
- c. Neither happy nor unhappy
- d. Not too happy
- e. Very unhappy

Thus, I created the “happiness” index by assigning points: Very happy = 2, pretty happy = 1, neither happy nor unhappy = 0, not too happy = -1, very unhappy = -2. Then, an average was calculated for each country.

(2) In both analyses, per capita GNP (\$) is used as the economic growth index, but

whereas Inglehart used data from the World Bank, I used data from the 2005 United Nations website because it provided expedient accessibility to the information.

Following the above procedures, the correlation diagram shown in Figure 2 was created using data from the AsiaBarometer Survey. What conclusions can be drawn from this diagram? In Figure 1, the relationship between the two variables appeared to be a first-quarter crescent moon-shaped curve sloping upward to the right. The results shown here, however, are quite different. The trend, at least in countries from Cambodia to Laos, Myanmar, Thailand, and Malaysia, shows that as per capita GNP (\$) increases, the happiness index value also increases. South Korea, Singapore, and Japan, however, are all deviant cases. In spite of the fact that all of these countries have a much higher per capita GNP (\$) than Malaysia, they have a much lower level of “happiness” than Malaysia. Like Inglehart, I must introduce the intervening variable of “cultural factors” to explain these deviant cases. The important point to take away from Figure 2 is that, unlike Inglehart’s analysis, we cannot ignore the fact that “deviant cases” exist. In the case of the AsiaBarometer Survey data, Sen’s hypothesis that “quality of life, including happiness, cannot just be reduced to economic indicators such as GNP and income” is definitely more applicable.

[Insert Figure 2]

II. Testing the Conceptual Framework of “Happiness Is Affective” While “Satisfaction Is Cognitive”

Based on the conceptualization that “happiness includes more affective elements while satisfaction includes more cognitive elements,” Andrews and Robinson have added their

own interpretation to the conclusion made by Campbell, Converse, and Rodgers that “as people age, their sense of satisfaction rises, while their sense of happiness declines.”

The following two data analyses attempt to test this substantive theory.

(1) Analysis of the relationship between “happiness” and “satisfaction in various aspects of life:” Pearson’s Correlation Coefficient analysis (first data set of AsiaBarometer Survey, 2003)

Table 1 shows the relationship between happiness and satisfaction in various aspects of life in each country.

[Insert Table 1]

These results show that the relationship between “happiness” and “satisfaction” is not a simple one. This is evident from the following two observations. First, the AsiaBarometer Survey included one question on “happiness” and sixteen questions on “satisfaction” with various aspects of life, which can also be used. If we examine the countries based on the size of the correlation coefficient between these sixteen items and happiness (according to Hiroshi Akuto (1987), a correlation coefficient is generally considered to be “very high” if it exceeds 0.6, “fairly high” if it exceeds 0.3, and “low” if it is lower than 0.3), we find that they can be divided into three types: countries with a high correlation coefficient of 0.3 or higher (Japan), countries with a relatively low correlation coefficient (Thailand, Malaysia, Myanmar, and Vietnam), and countries with a mid-range correlation coefficient (South Korea, China, India, Sri Lanka, and Uzbekistan).

Second, there are differences in the aspects of life that have a high correlation with “happiness” in different countries. An obvious example is found in “marriage/family”

and “standard of living/household income.” In Japan, “marriage/family” has the highest correlation with “happiness,” whereas the correlation between these two is low in Thailand, Malaysia, Myanmar, India, and Sri Lanka (and one might even say Uzbekistan). In these latter countries, “housing” and/or “standard of living/household income” have a relatively high correlation with “happiness.”

The two findings above suggest that there is no obvious conclusion regarding the effectiveness of the cognitive–affective conceptual framework. Rather, more intensive descriptions and analyses of the variations in each country need to be performed before a general hypothesis can be developed. This will help to bring Asia’s diversity out in even clearer terms.

(2) Analysis of the relationship between age and “happiness/satisfaction:” Pearson’s Correlation Coefficient analysis (second data set of AsiaBarometer Survey, 2004)

Table 2 shows the correlation coefficients calculated between “age” (low to high) and “happiness/satisfaction” (low to high) in each country.

[Insert Table 2]

Table 2 demonstrates the following findings.

- a. In almost all cases, the value of the correlation coefficient is very low. This is true even in cases where a statistical significance is found.
- b. If an attempt is made to find some kind of trend in spite of these low correlation coefficients, we find that the countries can be divided into three types: countries with a lot of positive correlations (Indonesia), countries with a lot of negative correlations (Japan, South Korea, Vietnam, Singapore,

Cambodia, and Laos), and countries in the middle (the Philippines, Thailand, and Myanmar).

c. Next, a consistent trend among the correlations is that the correlations between age and satisfaction with “household income,” “health,” and “standard of living” are all negative. That is, as age increases, satisfaction decreases: as age decreases, satisfaction increases. On items other than these three, the trends differ by country.

d. Finally, I attempted to conduct an analysis by adding the objective “last year’s pre-tax household income” to the subjective attitudes of “happiness” and “satisfaction.” The results showed a positive—albeit low—correlation between this item and “age” only in three countries, Japan, the Philippines, and Indonesia. That is, in these three countries, as age increases, actual income increases but satisfaction with that income falls.

These findings suggest that the notion that “satisfaction is cognitive” is not necessarily valid. Rather, they point to “intricacies of mind” in the form of “affect based on cognition” or “cognition directed by mind.” The discovery of this aspect of “intricacies of mind” must be viewed as an important contribution made by the AsiaBarometer Survey to the field.

III. *Testing the Relationship between the Objective and Subjective Indicators of Happiness/Satisfaction: Median Regression Analysis (second data set of AsiaBarometer Survey, 2004)*

McDowell and Newell suggest that “a strong relationship does not exist between objective and subjective indicators of quality of life,” and that the question of which of these should be used as the basis for social plans can become a challenging political issue.

To test this hypothesis, in this section I examine “last year’s pre-tax household income” as the objective indicator, and “satisfaction with household income” as the subjective indicator. Median regression analysis is used to ascertain the details of both relationships for each level. Louis Guttman developed this analytical method to easily ascertain whether a relationship between two variables is monotone or polytone. Guttman, however, did not publish this method. I learned it directly from him as part of a facet analysis at the Israel Institute for Applied Social Research in 1976. Later, I named this method “median regression analysis” and enlisted experts to create a computer program to perform the calculations involved. For details on this method, see my book *Facet Theory and Studies of Japanese Society: From a Comparative Perspective*.

[Insert Figure 3]

Figure 3 shows the results of the analysis. In these figures, the x-axis is the objective indicator (low to high), and the y-axis is the subjective indicator (low to high). Thus, a line that rises upward to the right indicates a positive correlation between the two variables. What is especially interesting here is that although the pattern generally rises upward to the right in most cases, a more detailed examination reveals several instances where different patterns emerge. For the purposes of this analysis, however, it is sufficient to simply distinguish between the following two patterns: (1) countries in which a monotone relationship exists between the two variables (Malaysia and Myanmar) and (2)

countries in which a polytone relationship can partially be seen between the two variables (all other countries). There are considerably more countries in the second group than in the first group. It is especially interesting that these countries can be divided into two types: (1) countries where the polytone relationship—specifically, where the regression line expressing the relationship between the two variables does not rise simply upward to the right but instead moves irregularly up and down more like the needle on a seismograph—can be seen in both the lower and higher income classes (Japan, Singapore, Thailand, Cambodia, and Laos), and (2) countries where the polytone relationship can be seen in only the higher income class (South Korea, Vietnam, and Indonesia). Further analysis that incorporates the socioeconomic conditions in each country needs to be conducted.

The above analysis supports the hypothesis of McDowell and Newell that “a strong relationship does not exist between objective and subjective indicators of quality of life.” However, since this analysis suggests that conditions specific to each country may play a significant role in the outcome, it is important that efforts be made to develop a theory that can incorporate this factor.

IV. Testing the Conceptual Framework of “Small Happiness” Versus “Great Happiness:” Factor Analysis (second data set of AsiaBarometer Survey, 2004)

In this section I investigate whether the conceptual distinction Aoki made between “small happiness” and “great happiness” can also be developed into an operational distinction using the AsiaBarometer Survey data. In other words, I attempt to operationalize Aoki’s

conceptualization of “small happiness” and “great happiness.”

Earl Babbie describes conceptualization and operationalization as follows. “Conceptualization is the process of refining and clarifying an abstract concept, while operationalization is the development of specific survey methods (operations) for empirically observing this concept in the real world” (2001). The first step in attempting to conduct this kind of operationalization using data from the AsiaBarometer is to classify the question items. Of course, for this analysis, these would be the items on “happiness and satisfaction.” As stated several times above, although the question regarding “happiness” is a general question, the questions regarding “satisfaction” ask about various specific aspects of life. Thus, I tentatively divide these areas into those that correspond to “small happiness” and those that correspond to “great happiness.” To do this, I use the idea of “distance from self,” which has long been used in the field of sociology. Among the question items, those on public safety, the condition of the environment, the social welfare system, and the democratic system clearly have a relatively large “distance from self.” Thus, I tentatively posit these as the variables corresponding to “great happiness”—that is, the operational variables corresponding with the conceptualization of “great happiness”—and all the other items as the variables corresponding to “small happiness.”

Next, a determination must be made on which method of data analysis is most suitable to investigate these hypothetical categories. Here I use factor analysis, and therefore conducted a factor analysis for each country. Figure 4 shows the results.

[Insert Figure 4]

The results indicate that in many countries, the four questions on public safety, the environment, social welfare, and democracy, which were thought to be variables that correspond with “great happiness,” together emerge as a single independent factor. In Thailand, Vietnam, and Myanmar, however, they do not emerge as an independent factor, but rather comprise a single factor along with other variables, such as friends, neighbors, and leisure. Thus, the conceptual framework of Aoki is generally supported by the AsiaBarometer Survey. Yet, at the same time, work definitely remains to be done in conducting a more in-depth analysis based on the specific conditions in each country.

Conclusion

In this article I describe efforts to test several theories regarding “happiness and satisfaction” using data from the AsiaBarometer Survey. Several interests motivated my efforts to conduct this type of data analysis.

On the one hand, I was interested in determining whether the various hypotheses developed in previous studies based on observations or surveys conducted primarily in Europe and the United States could also be confirmed by the AsiaBarometer Survey, which focuses on Asian societies. On the other, I was interested in learning whether concepts of “happiness and satisfaction” could be considered equivalent across countries by comparing existing survey data primarily from Europe and the United States against survey data from the AsiaBarometer.

With regard to my former interest, my data analysis shows that some hypotheses from previous studies are applicable in Asia, whereas others are not. The important point to be

taken from my analysis, and which has already been noted, is that the “socioeconomic factors” and “cultural factors” in each country may account for those cases in which hypotheses were not supported by the Asian data. So how can the mechanisms governing the involvement of those factors be tested?

My second interest is intricately intertwined with the first. Various hypotheses have already been developed regarding the cultural differences in the meaning of happiness and satisfaction. The data analysis conducted here yielded several important suggestions on those hypotheses. So how can those various hypotheses be tested?

Figuring out how to address these two research questions through the international comparative analysis of survey data is the greatest challenge for the future.

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