Interpersonal Mistrust and Unhappiness Among Japanese People

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Abstract Our main objective in this paper is to evaluate the possible association between interpersonal mistrust and unhappiness among Japanese people. Based on cross-sectional data for the Japanese general population from the Asia Barometer Survey (2003–2006), we analyzed the relationship between interpersonal mistrust and unhappiness using a logistic regression, adjusted for age, gender, marital status, income, education, occupation, religious belief, and self-rated health. In a total of 2685 participants (mean age, 42.7 years; 47.5% men), 204 (7.6%) were classified as unhappy. For the questionnaire items involving mistrust, 1490 (55.5%) participants reported that they "can't be too careful in dealing with people", and 1642 (61.2%) participants reported that "people mostly look out for themselves". In a multivariable-adjusted model using the average score based on these 2 questions, interpersonal mistrust was associated significantly with unhappiness, with an odds-ratio of 2.06 (95% CI, 1.25 to 3.38). Other features associated with unhappiness included: age 50-59 years, marital status of single, divorced, separated, or widowed, low income, mid-education, and poor self-rated health. Gender, occupation, and religious belief were not associated with unhappiness. In conclusion, interpersonal mistrust is associated significantly with unhappiness among Japanese people. Public policies restoring interpersonal trust are needed to promote happiness among the Japanese.

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1 Introduction

Happiness is a critical aspect of individual welfare and is a worthy goal of societies. Through appropriate measures and specific interventions, happiness can be increased (Norrish and Vella-Brodrick 2007). Thus, there is a renewed interest in searching for factors that determine happiness and in elucidating mechanisms that link these factors to happiness. Multiple demographic, social, economic, health-related, cultural, and genetic factors are considered important determinants for happiness, but the mechanisms that link each factor to happiness appear complicated.

An individual's genetic construction correlates weakly with happiness, although studies of twins have indicated that a genetic factor could affect the level of happiness. Identical twins are more similar to each other in happiness, while non-identical twins are not (Lykken 1999). The levels of happiness of identical twins raised apart from each other are just as similar as with identical twins that grew up close together (Lykken 1999).

However, based on an analysis of longitudinal studies, happiness is not entirely a builtin trait and the genetic contribution is at best modest and explains only part of individual variance (Veenhoven 1994). More importantly, there appears to be an interaction between the genetic factor(s) and the environment. The genetic factor affects the level of happiness by providing individuals with a predisposition towards happiness in their environment or personal life experiences.

There are several features that are more likely to make a greater impact on happiness level compared with individual genetic construction. The US General Social Survey introduced five features as determinant factors that affect happiness in the following (descending) order of importance: marital status, income (wealth), employment, interpersonal trust, and health (Di Tella et al. 2003). Consequently, the World Values Survey has conducted a series of survey studies since 1981 and has added personal freedom (government quality) and philosophy of life (personal values), as additional determinant factors affecting happiness (Helliwell 2003).

First, one of the most important factors affecting happiness is marital status. Differences in marital status can cause a difference in happiness. Divorce, separation or widowhood is all equally deleterious to the happiness levels of each partner (Clark and Oswald 2002). When we also compare the effects of divorce rates among countries, these rates have significant effects on the happiness levels, as well as on the suicide rates (Layard 2005). Research indicates that people who are in love generally have better health, better psychological well being, and are overall happine (Ryff and Singer 2003).

Second, studies have long investigated whether greater income would make us happier. The general consensus would be that high income increases happiness when it lifts out of abject poverty and into the middle class, but it does little to increase happiness thereafter (Gilbert 2006). Although a moderate increase in income usually enhances the feeling of happiness, extraordinarily higher income is not always associated with greater happiness, as the popular old saying suggests that "money cannot buy happiness" (Kahneman et al. 2006).

Third, work provides income as well as extra-meaning of life to individuals through a feeling of contributing to the society. Unemployment reduces income, but also it reduces happiness levels by lowering self-respect and work-related social relationships. The negative effect of unemployment is even greater, compared with that of losing income (Winkelmann and Winkelmann 1998). In addition, the level of control that individual

workers have over their jobs is also an important issue. For instance, among British civil servants in all hierarchical ranks, those who perform the most uncontrollable routine work are at the highest risk for poor health and premature death (Marmot 2004).

The fourth critical determinant for happiness is health status, and better health is usually related to increased happiness. However, healthy people are not always happy. Moreover, people have an ability to adapt to physical limitations, although people may not be able to easily adapt to mental illness, such as depression. People with physical disability may report the same levels of happiness as people with full functional status (Subramanian et al. 2005). Those who are considered in poor health status can still be happy when other critical factors meet the demands of those people.

Fifth, personal freedom also affects happiness and individual happiness also depends on the quality of the government (Layard 2005). This encompasses personal, economic, and political freedom and can be used as indicators for the quality of the government. War, domestic conflict, autocracy, or a military government are among the national situations associated with poor personal freedom in individuals and notoriously make people very unhappy.

Sixth, personal value, or philosophy of life, is the additional determinant factor for happiness. Recent research indicates that people who have religious beliefs or who believe in spiritual powers are happier, and this relationship also exists at the national level (Soroka et al. 2005). We also found that the level of religiosity is directly related to satisfaction (Inoguchi and Hotta 2006).

In addition, there are also several minor factors that are considered to have a relatively negligible effect on happiness. Age and gender are minor factors for happiness (Easterlin 2003). Happiness does not decline inexorably with age and elderly people can feel even greater levels of happiness than young people (Subramanian et al. 2005). Likewise, men and women are happy to a similar degree in almost all countries (Easterlin 2003). Intellectual quotient correlates only weakly with happiness (Lykken 1999).

Last, but not least, there is growing interest in psychosocial factors with positive attitudes, such as trust, optimism, and sociability, as determinants for happiness (Antonucci et al. 1997; Berkman 1995; Di Tella et al. 2003; Helliwell 2003). Among these factors, interpersonal trust is now considered as an important positive predictor of subjective well being (Barefoot et al. 1998; Layard 2005). Trust is a belief that the sincerity or the good will of others can be generally relied upon (Rotter 1967). Development of the capacity to trust others is essential for developing an integrated personality and successful social adjustment (Suedfeld et al. 2005).

In contrast, negative attitudes, such as mistrust, hostility, suspiciousness, and cynicism, are related to poor psychological well being (Gallo et al. 2006). Among these negative attitudes, mistrust is the cognitive habit of interpreting the intentions and behavior of others as dishonest, unsupportive, and self-seeking. The central cognitive component of mistrust is suspicion of others based on a belief that they are looking out for their own good and they will even victimize you in pursuit of their own personal goals (Mirowsky and Ross 1983). Mistrusting people believe it is safer to keep the distance from others. Mistrust can also hinder the development, maintenance, and the use of social support networks. Further, mistrusting individuals are less likely to seek social support when in need, may be uncomfortable with any support, and may even reject offers of support. By setting off this vicious cycle, mistrusting individuals can elicit hostile responses from others and unfriendly conditions that may justify their beliefs. Moreover, they can be easy targets of exploitation and crime due to little reciprocity and no mutual assistance in social networks. Mistrust thus causes unhappiness and can develop into paranoia with a higher risk for suicide (Ross 2003).

There are warning indications of trends within industrialized countries with regard to social disconnection and increased unhappiness (Lane 2000; Putnam 2000). Robert Lane argues, in his book "*The Loss of Happiness in Market Democracies*," that the market economy causes harm to happiness, but that a trustful society could counterbalance the detrimental effects of the market economy (Lane 2000). For instance, Japan is one of the richest countries. The degree of income equality has been relatively stable in Japan based on international comparative data (Shirahase 2001), and the Japanese people have the highest life expectancy in the world (Kawachi and Kennedy 2002). However, according to the international values survey, the Japanese are among the most unhappy in industrialized countries (Inglehart 1990). Moreover, based on our previous survey, the Japanese report lower levels of interpersonal trust compared with other countries (Inoguchi 2005).

However, few studies have investigated the relationship between interpersonal mistrust and unhappiness in Japan. It is unclear whether interpersonal mistrust is related to unhappiness among the Japanese people. Thus, in this study, we aimed to evaluate the association between interpersonal mistrust and unhappiness among the Japanese, using data from the Asia Barometer Survey, multi-national and multidimensional surveys that were conducted throughout Asia.

2 Methods

2.1 Study Participants

We combined the data from three cross-sectional surveys conducted in Japan in 2003, 2004, and 2006, as a part of the Asia Barometer Survey (Inoguchi 2005). These surveys enrolled participants aged 20–69 years, since these surveys focused on working adults in Asian countries.

For the survey planning, we classified all municipalities in Japan into five regions, including Hokkaido & Tohoku, Kanto, Chubu & Hokuriku, Kinki, and Chugoku, Shikoku and Kyushu. In each region, municipalities were stratified into five categories corresponding to their population sizes, as follows: (1) 12 metropolises: Sapporo, Sendai, Chiba, Tokyo (metropolitan area), Yokohama, Kawasaki, Nagoya, Osaka, Kobe, Hiroshima, Kita-Kyushu, and Fukuoka, (2) Cities with a population of more than 150,000, (3) Cities with a population between 50,000 and 150,000, (4) Cities with a population less than 50,000, and (5) Towns and Villages. Likewise, all municipalities in Japan were stratified into 25 blocks. Within each block, primary sampling units (census tracts) were randomly selected through probability proportionate to size sampling. Lastly, 10 individuals were randomly selected from each registration ledger of the census tracts.

2.2 Data Collection

We used face-to-face interviews to provide structured-questionnaires. The detailed content of the questionnaires has been previously published elsewhere (Inoguchi 2005). Data collection included demographics, marital status, socioeconomic factors (income, education, and occupation), religious belief, self-rated health, self-rated happiness, and interpersonal mistrust, in addition to information on political, environmental, and daily-life issues, which were related to the Asia Barometer Survey. Age was categorized into five groups of 20–29, 30–39, 40–49, 50–59, and 60–69 years old. Categories of marital status included: married/partnered, single, divorced, separated, or widowed. For religious belief, we asked each participant "Do you regard yourself as belonging to any particular religion?" and a yes or no response was recorded.

Annual household income was used as an income variable in this study. The lowincome group included participants with an annual household income less than 5 million Japanese yen. The mid-income group included those with an income from 5 million yen to less than 8 million yen. The high-income group included those with an income of 8 million yen or greater (The average exchange rates to 1 US dollar in 2003, 2004, and 2006 were 113, 108, and 117 Japanese yen, respectively).

For educational attainment, the low-education group included participants who had completed primary school or junior high school. The mid-education group included participants who had completed high school. The high-education group included participants who had completed technical school, college, university or graduate school.

For occupational status, three categorical levels were used, including self-employed, employed, or unemployed. The self-employed group included: (1) self-employed in agriculture, forestry or fisheries, (2) business owner in mining or manufacturing industry of an organization with up to 30 employees, (3) vendor or street trader, (4) business owner or manager of an organization, and (5) self-employed professional. The employed group included: (1) senior manager, (2) employed professional or specialist, (3) clerical worker, (4) sales, (5) manual worker, (6) driver, and (7) other worker. The unemployed group included: (1) homemaker, (2) student, (3) retired, and (4) unemployed.

In this study, self-rated health was defined as the individual's personal satisfaction with their overall health. In the survey, we asked, "Please tell me how satisfied or dissatisfied you are with your health? Would say you are very satisfied, somewhat satisfied, neither satisfied nor dissatisfied, somewhat dissatisfied, or, very dissatisfied with your health?" These categories were collapsed to form a dichotomous outcome of self-rated health: poor health (1) for very dissatisfied, somewhat dissatisfied, or neither satisfied nor dissatisfied, and good health (0) for very satisfied, or somewhat satisfied.

For self-rated happiness, we asked, "All things considered, would you say that you are happy these days? Would say you are very happy, quite happy, neither happy nor unhappy, not too happy, or very unhappy? These categories were also collapsed to form a dichotomous outcome of self-rated happiness: unhappy (1) for very unhappy, or not too happy, and happy (0) for very happy, quite happy, or neither happy nor unhappy. Measuring happiness by a single item is considered reliable, valid, and viable in community surveys, as well as in cross-cultural comparisons (Abdel-Khalek 2006).

For measuring interpersonal mistrust, we used two items with binary responses (scores 0 or 1). We asked: (1) for trust in people, "Would you say that most people can be trusted (score 0) or that you can't be too careful in dealing with people (score 1)?" and (2) for trust in human good, "Would you say that most of the time people try to be helpful (score 0) or that they are mostly looking out for themselves (score 1)?". These questions have been widely used in previous studies on interpersonal trust.

2.3 Statistical Analysis

Descriptive statistics were calculated and presented as the mean with standard deviation or the count number with proportion to the overall sample population where appropriate. The interpersonal mistrust scale was constructed by averaging the individual responses to the above two items involving interpersonal mistrust. A logistic regression model was used to evaluate the relation of interpersonal mistrust to unhappiness, adjusted for age, gender, marital status, income, education, occupation, religious belief, and self-rated health. The odds-ratios (OR) along with 95% confidence interval (CI) were estimated in each variable for unhappiness. The OR value greater than 1 indicated a greater effect that was positively related to unhappiness. All statistical analyses were performed using SPSS 15.0J (SPSS Japan, Tokyo, Japan). Two-tailed *P*-values <0.05 were considered statistically significant.

3 Results

We used cross-sectional data from three surveys conducted among the Japanese in 2003, 2004, and 2006, as a part of the Asia Barometer Survey. We obtained a response rate of 58.5% from eligible persons and the final sample size of this study was 2685 participants. Table 1 presents the characteristics of the participants. The mean age was 42.7 years (standard deviation, 12.4). Women comprised 52.5% of the sample. Of these 2,685 participants, 2,015 (75.0%) participants were married and partnered. There were 1,840 (68.5%) participants who reported that they did not belong to any particular religion. Further, 962 (35.8%) participants were classified as in poor health. Of 2,685 participants, 204 (7.6%) were classified as unhappy.

Table 2 presents the results of the interpersonal mistrust questionnaires. For the item involved with trust in people, 1,490 (55.5%) participants reported that they "can't be too careful in dealing with people", while 1,102 (41.0%) participants reported, "most people can be trusted". For the item involved with trust in human good, 1,642 (61.2%) participants reported that "people mostly look out for themselves", while 898 (33.4%) participants reported that "people generally try to be helpful". Table 2 also presents the data of the interpersonal mistrust scale, which was constructed by averaging the individual responses to the two items above. Those with a scale of 1 (score 1 for both items) were noted in 1,100 (41.0%) participants.

Table 3 presents the results from logistic regression of interpersonal mistrust for unhappiness, adjusted for age, gender, marital status, income, education, occupation, religious belief, and self-rated health. Interpersonal mistrust was associated significantly with unhappiness with an OR of 2.06 (95% CI, 1.25–3.38). Other features that were associated significantly with unhappiness included age of 50–59 years (OR 2.43; 95% CI, 1.34–4.40), marital status other than married/partnered (OR 3.64; 95% CI, 2.48–5.36), low income (OR 2.58; 95% CI, 1.41–4.70), mid-education (OR 1.70; 95% CI, 1.16–2.51), and poor health (OR 3.91; 95% CI, 2.69–5.67). Gender, occupation and religious belief were not associated with unhappiness.

4 Discussion

Our study presents cross-sectional evidence of a significant association between interpersonal mistrust and unhappiness among the Japanese people, after adjustment for age, gender, marital status, income, education, occupation, religious belief, and self-rated health. People with interpersonal mistrust are more likely to report that they are unhappy than people without mistrust in Japan. We also note other significant factors for unhappiness, including age of mid-life (50–59 years), marital status of single, divorced, separated, or widowed, lowincome, mid-education, and poor health. Gender, occupation and religious belief were not

Table 1 Characteristics of t

participants (N = 2,685)

Characteristic	Ν	%
Age		
20–29	470	17.
30–39	682	25.
40-49	605	22.
50-59	741	27.
60–69	187	7.
Male gender	1276	47.
Marital status		
Married/Partnered	2,015	75.
Others*	670	25.
N/A	1	0.
Income		
Low	1,047	39.
Mid	672	25.
High	433	16
N/A	533	19
Education		
Low	200	7
Mid	1,190	44
High	1,284	47.
N/A	11	0.
Occupation		
Unemployed	762	28.
Employed	1,577	58.
Self-employed	337	12.
N/A	9	0.
Religious belief		
No religious belief	1840	68.
Having religious belief	807	30.
N/A	38	1.
Self-rated health		
Poor	962	35.
Good	1,718	64
N/A	5	0.
Self-rated happiness		
Нарру	2464	91.
Unhappy	204	7.

N/A = data not available *Others include single, divorced separated, or widowed

associated with unhappiness. Based on these findings, we suggest several policy implications. Restoration of interpersonal mistrust may promote happiness among the Japanese people. Thus, development of a strategy to emphasize the acquisition of positive interpersonal trust along with the elimination of mistrust may enhance happiness. Policies to improve social skills, interpersonal ties, and social support to spread positive interpersonal trust are likely to be important to improve happiness in Japan (Delamothe 2005).

Item and scale	Ν	%
For trust in people (score)		
"Most people can be trusted" (=0)	1,102	41.0
"Can't be too careful in dealing with people" (=1)	1,490	55.5
"Don't know"	93	3.5
For trust in human good (score)		
"Most of the time, people try to be helpful" (=0)	898	33.4
"People are mostly looking out for themselves" (=1)	1,642	61.2
"Don't know"	145	5.4
Interpersonal mistrust scale*		
0	554	20.6
0.5	833	31.0
1	1,100	41.0
N/A	198	7.4

Table 2 Interpersonal mistrust of the participants (N = 2,685)

*Constructed by averaging the individual responses to the two items above

There are several strengths of our study. Firstly, this is the first study to evaluate the association between interpersonal mistrust and unhappiness among the Japanese people. Our previous data, and other surveys, suggest that the Japanese people report being unhappy more often than people in other countries (Inglehart 1990; Inoguchi 2005), and that the Japanese also report higher levels of interpersonal mistrust than those in other countries (Inoguchi 2005). The significant association between interpersonal mistrust and unhappiness may explain why the Japanese are among the unhappiest people in industrialized countries despite having the highest life expectancy and the greatest healthy longevity in the world.

Secondly, our results are based on a multivariable model adjusted for potential confounders, such as demographic, socioeconomic, religious, and health status. In evaluating mistrust and unhappiness, these factors should be adjusted for. In particular, it is well known that higher levels of interpersonal trust may improve health status at the individual level (Barefoot et al. 1998; Hawe and Shiell 2000; Hyyppa and Maki 2001; Poortinga 2006; Rose 2000), and that health status is also related to happiness (Barefoot et al. 1998). In addition, individuals with higher socioeconomic status perceive their societies as less hostile and friendly compared with those with lower socioeconomic status (Gallo et al. 2006). At the same time, socioeconomic status is also known to be related to happiness (Poortinga 2006; Shirai et al. 2006). Moreover, in addition to marital status, religious belief may possibly be related to both interpersonal trust and an individual's happiness (Helliwell and Putnam 2004; Oxman et al. 1995). Taken together, any one of these factors of health status, socioeconomic status, marital status, and religious belief may confound the observed association between mistrust and unhappiness. Thus, our results based on the adjusted model are more reliable for estimating the possible association between interpersonal mistrust and unhappiness.

Thirdly, we were also able to assess the potential association between sociodemographic factors and unhappiness after taking account interpersonal mistrust. The results of our study confirmed previous reports that found several factors associated with unhappiness: including mid-life age, marital conflict, low income, and poor health (Helliwell and

Variable	OR	95% CI	P-value
Age			
20–29 (reference)	1.00		
30–39	1.43	(0.80-2.56)	0.233
40–49	1.53	(0.82-2.85)	0.184
50–59	2.43	(1.34-4.40)	0.003**
60–69	0.29	(0.08 - 1.07)	0.063
Gender			
Male	1.31	(0.90-1.92)	0.160
Female (reference)	1.00		
Marital status			
Others***	3.64	(2.48-5.36)	< 0.001**
Married/Partnered (reference)	1.00		
Income			
Low	2.58	(1.41-4.70)	0.002**
Mid	1.70	(0.89-3.26)	0.109
High (reference)	1.00		
Education			
Low	1.24	(0.64–2.41)	0.523
Mid	1.70	(1.16–2.51)	0.007**
High (reference)	1.00		
Occupation			
Unemployed	1.10	(0.58-2.07)	0.775
Employed	0.99	(0.58–1.67)	0.956
Self-employed (reference)	1.00		
Religious belief			
No religious belief	0.79	(0.54–1.15)	0.213
Having religious belief (reference)	1.00		
Self-rated health			
Poor health	3.91	(2.69–5.67)	< 0.001***
Good health (reference)	1.00		
Interpersonal mistrust	2.06	(1.25-3.38)	<0.001**

 Table 3
 Multivariable adjusted logistic regression model for unhappiness

OR = Odds ratio; CI = Confidence interval: *P < 0.05; **P < 0.01. ***Others include single, divorced, separated, or widowed

Putnam 2004; Subramanian et al. 2005). In contrast, gender, occupation and religious belief were not associated with unhappiness in our study. There was no difference for unhappiness between mid income and high income, although low income was associated with unhappiness. The effect of income on happiness also seems to plateau among the Japanese. Thus, consistent with previous reports (Diener et al. 1993; Kahneman et al. 2006), money does not seem to buy happiness.

Attainment of mid-education was associated with unhappiness, compared with attainment of high and low educational status in the current study results. There is a strong predominance of the social hierarchy system of prestigious national and private universities in Japan. The university that one attends and graduates from has great impact on one's career and general social status in Japan. The tight linkage between graduation background and career among the Japanese produces intense competition in entrance exams for admission to the most prestigious universities. Those with only mid-education (high school graduates) may experience unhappiness due to higher stress related to past experience of failure to enter university. Therefore, the typical "unhappy" Japanese may be a person 50–59 years of age, single (or divorced, separated, or widowed), with low income, mid-education, poor health, and interpersonal mistrust.

Interpersonal mistrust may induce unhappiness through multiple mechanisms. Firstly, the higher levels of interpersonal mistrust are related to weaker ties to friends, family and society and the decreased perception of social support (Hibbard 1985). Consequently, having fewer social ties and networks leads to individuals decreased feelings of happiness (Diener and Seligman 2002). Seligman also proposes, in his book "Authentic Happiness" (Seligman 2002), that the critical components of happiness are pleasure, engagement (the depth of involvement with others), and meaning (using personal strengths to serve a larger end); based on the idea by Seligman, among these three components of happiness, engagement is the most important determinant. Secondly, interpersonal mistrust leads to poor affective support and fewer sources of mutual respect (Berkman and Kawachi 2000). These psychosocial resources lead to greater unhappiness in neighbors and communities. Thirdly, the theory of the diffusion of innovations suggests that innovative behaviors and ideas diffuse more rapidly when people trust each other (Rogers 2003). Rapid diffusion of innovation or valued creative ideas makes people happier. Conversely, the diffusion of innovation is likely to be stagnant in societies with higher mistrust and thus people easily miss the chance to increase their happiness levels in such societies. Fourthly, a neighborhood that is poor in interpersonal trust is less successful for access to local services and amenities. Thus, local pressure groups that lobby for the provision of services are not available to make a difference in terms of access to such amenities and resources (Berkman and Kawachi 2000).

Our study is based on the analysis of cross-sectional data and therefore it has inferential limitations. It may also be possible that unhappiness leads to social isolation and mistrust. Another possibility could be that unhappiness and mistrust may reflect different facets of a common underlying construct, such as the mental component of poor "psychological wellbeing". However, evidence has now accumulated, indicating that psychosocial attitudes are also critical determinants for happiness (Kahneman and Krueger 2006). Since interpersonal mistrust is one of the more notorious negative psychosocial attitudes, the link between interpersonal mistrust and unhappiness can be investigated in this context.

Our study suggests that interpersonal mistrust is associated with unhappiness among the Japanese. Further research may be needed to generalize this finding among people in other countries. Although it may be difficult to improve interpersonal trust in individual adults, there are potential ways to enhance the collective characteristics of interpersonal trust in communities. More investment is needed in policies that promote interpersonal trust. In this context, an important task for future investigations will be to identify the characteristics of civic associations and public policies that are more likely to serve the common interests and therefore improve interpersonal trust.

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