Initial investigation on the data from the Quality of Life Survey FY2011

Content

1 Outline of the survey

（1） Purpose of the survey

　To investigate and clarify continually people's evaluation of quality of life and emotions, as well as the factors that cause them.

（2） Survey items

①sense of happiness、②interdependent happiness, ③life satisfaction、④affect balance、⑤satisfaction in life's various phases、⑥subjective evaluation of life circumstances、⑦ living environment、⑧anxieties、⑨securities、⑩social supports、⑪self-reported health, ⑫frequencies of social contacts, etc.

（3） Outline of the survey

①Coverage: Japanese nationals over the age of 15 in the household, and households based in facilities.

②Sampling: The samples are selected based on the three-stage stratified sampling method. The sampling units at three stages are 1) municipalities, 2) survey units, and 3) individuals.

③Number of samples: Total number of samples : 10,440（1,000（disaster area[1]）＋9,440 （non-disaster area））

④Area coverage: 337 municipalities（522 survey units）

⑤Sampling roster : Basic resident register

（4） Survey period

　　　March 1st -March 16th, 2012

（5） Survey method

　　　The survey uses direct-visit and self-completion questionnaires

（6） Survey agency : Shin-Joho Center

---

[1] The disaster area is defined here as areas affected by Disaster Relief Act, based on the Great East-Japan Earthquake (exclusive of the Tokyo metropolitan area).

（7）Response rate

Over all response rate : 61.8% (=6451/10440)

Response rates by disaster area and others

	respondents	samples	response rates
Non-disaster area	5,824	9,440	61.7%
Disaster area	627	1,000	62.7%

Number of response by age and sex

	Number of responses		Number of ideal responses derived from population ratio in the 2010 census	
	Men	Women	Men	Women
15-19	143	173	182	173
20-29	272	304	407	396
30-39	435	409	536	524
40-49	483	551	493	488
50-59	502	515	474	480
60-69	643	673	517	550
70-	556	792	500	730
Total	3034	3417	3109	3342

2 Summary results

（1）Subjective well-being

①Level of current happiness

To the question: "Currently, how happy are you? Please score the degree of your happiness between 10 (Very happy) and 0 (very unhappy)," the average was 6.6. This result is very similar to the average point of 6.5 from the same questionnaire in the National Survey on Lifestyle Preference conducted in March 2010 and 2011 (Table 1).

Table 1   Comparison of Level of Current Happiness

Survey（period of the survey）	Average level of happiness
This time（March 2012）	6.6
National Survey on Lifestyle Preference（March 2011）	6.5
National Survey on Lifestyle Preference（March 2010）	6.5

The frequency distribution curve of the responses (Graph 1) shows two peaks, at points five and eight. This two-peak-shape is consistent with previous survey on level of happiness in Japan.

Graph 1   Distribution Curve of level of Current Happiness
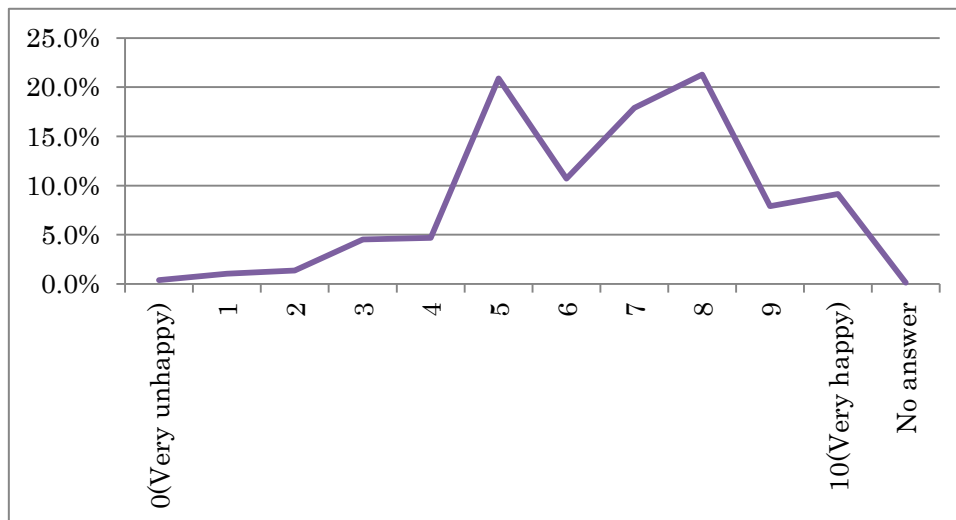
By sex, men's average is 6.3, while women's is 6.9 (Table 2).

Table 2　Average Level of Happiness by Sex

	average	standard deviation	no. of respondents
Men	6.3	2.1	3029
Women	6.9	2.0	3413
Total	6.6	2.1	6442

By age, the average level of current happiness declines from the 10s to 20s. While it increases toward the 30s, it turns to downward once again until it hits the bottom at 50s. As a result, the entire curve is "W-shape". （Graph 2）。

Graph 2　Level of Current Happiness by Age
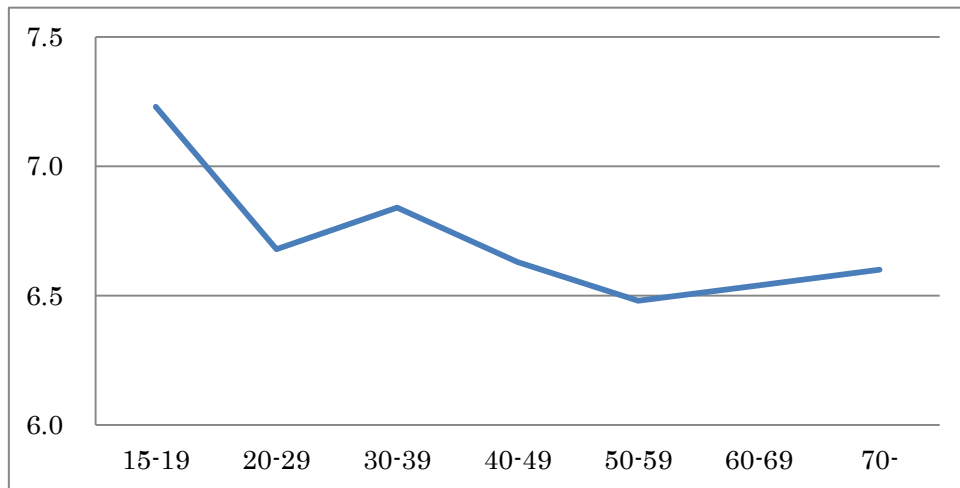
By marital status and by age, level of current happiness of married persons is stable, with a one-time decline between the 30s and 40s. On the other hand, the curve of level of happiness of those who never-married is "U-shaped", which declines towards the 30s and rises again at 70 and older.　The level of happiness of those who are divorced is lower than those who never-married, except for those in their 40s.　The level of happiness of the widowed is higher than the never-married and divorced, but lower than the married（Graph 3）.　The increase in married rate could be a large factor behind the rise of average happiness in the 30s.（Graph 4）

5

Graph 3   Level of Current Happiness by Marital Status
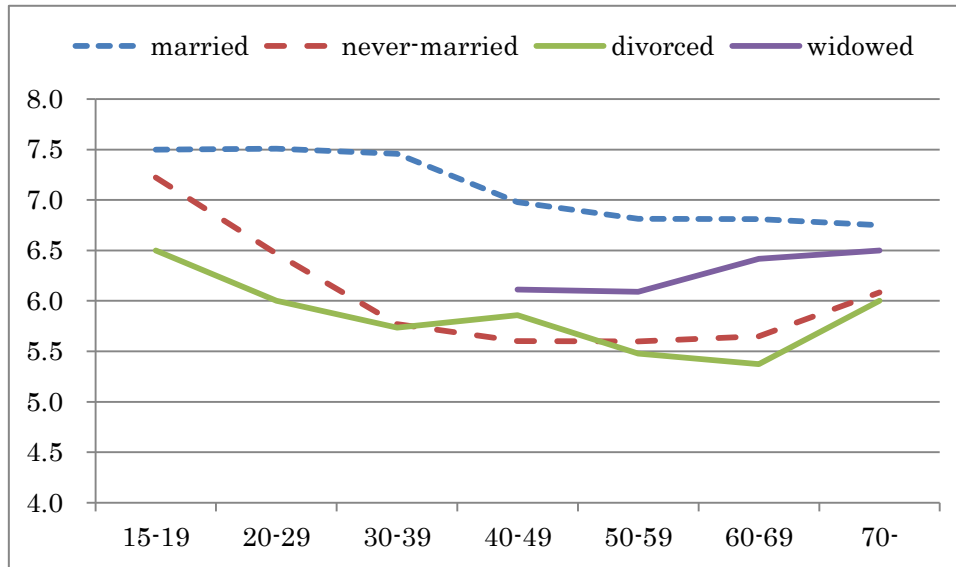
Graph 4   Composition of Marital Status By Ages
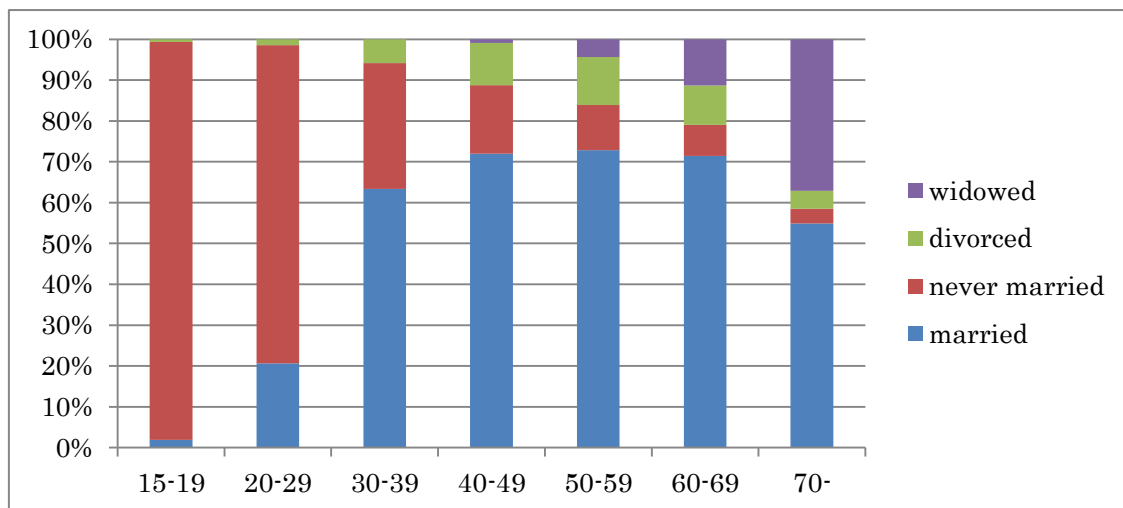
By employment status, among people who work, executives of companies or corporations responded with highest level of current happiness, while temporally or daily employees responded with the lowest levels of happiness. Among people who do not work, those who are taking leave responded with the highest happiness (7.3), followed by those who attend school (students) (7.2), and those who engage in housework (housewives or househusbands) (7.1). Level of current happiness was very low for those who are seeking jobs (unemployed) with an average score of 5.2（Table 3）. The caveat for interpreting the above results is that the age and income of respondents differ according to their employment status.

Table 3   Level of Current Happiness, Age, Household Income (index) and Individual
Income By Employment Status

Table 3-1   "I have worked"

	Level of current happiness	Age	Household income (index)	Individual income (index)	No. of respondents
Regular employee	6.6	44.5	4.4	3.3	2588
Temporary or daily employee	6.2	48.4	3.4	1.8	356
Executive of company or corporation	7.2	52.8	5.2	4.5	234
Self-employed	6.5	58.9	3.9	3.0	419
Family worker	6.7	55.7	4.0	1.6	238
Doing piecework at home	6.7	61.9	3.1	1.4	67
Total	6.6	47.9	4.3	3.1	3902

（NB: Number of respondents are number of those who responded question on the level of current happiness.）

Table 3-2 "I have not worked at all"

	Level of current happiness	Ages	Household income (index)	Individual income (index)	No. of respondents
Taking leave from work	7.3	48.6	3.8	2.4	55
Seeking jobs	5.2	44.8	2.7	0.8	126
Attending school	7.2	17.7	4.6	0.1	290
Doing housework	7.1	58.8	3.7	0.9	691
Starting retirement	6.5	73.4	3.1	2.3	1010
Others	6.2	59.1	3.0	1.5	253
Total	6.7	59.0	3.4	1.5	2425

NB: In the survey, the questionnaire on income asks not exact figures but ranges of income. To facilitate comparisons, indexes of both household income and individual income are constructed as follow; "without income" =0、"from 1 yen to million yen" =1, "from million yen to two million yen" =2, "from two million yen to three million yen" =3,"from three million yen to five million yen" =4, "from five million yen to 7 million yen"=5, "from 7million yen to 10 million yen"=6, "more than 10 million yen" =7.

②Perceived level of happiness among other family members

When asked about the level of current happiness of other family members living together as perceived by the respondents, they answered 6.8 on average, which is slightly higher than that of average respondents (Table 4-1). However, for people who answered both their own happiness and of his/her family, the differences between the levels of happiness are very small and have no statistically significant difference in mean value (Table 4-2). The higher average value of the perceived family member's happiness than that of average respondents might be the results of the share of "no answer" or "do not have a family living together."

Table 4-1 Family Member's Level of Current Happiness

	average	standard deviation	no. of respondents
Men	6.5	2.0	2556
Women	7.0	1.9	2781
Total	6.8	2.0	5337

Table 4-2 Difference in Level of Happiness Between Family Members and Himself/Herself[2]

	average	standard deviation	no. of respondents
Men	0.04	1.28	2554
Women	-0.01	1.21	2778
Total	0.01	1.24	5332

Table 5 Perceived Level of Happiness of Other Family Members and Respondents

---

(Data on "do not have family living together" is excluded in the above graph)

③Desired level of happiness

To the question: "What is your desired condition when 0 is "feeling unhappy all the time", 5 is "feeling unhappy half of your time, and feeling happy for half of your time," and 10 is "feeling happy all the time", the average point was 7.2, which is higher than the average of level of current happiness by 0.6 (Table 5、Graph 6). By sex, both men and women responded higher in desired level of happiness than in the level of current happiness. By age, the curve of average desired level of happiness is an inverted U-shape, which peaks in the 30s. The desired level and current level coincide in the 10s, while the gap begins to widen as age advances, and becomes largest in the 40s and 50s. Then, as a result of the decline in desired level and increase in the current level, the gap shrinks (Graph 7).

Table 5　Average Points of Desired and Current Level of Happiness

	Desired	Current	Gap
Men	7.0	6.3	0.7
Women	7.5	6.9	0.5
Total	7.2	6.6	0.6

Graph 6　Distribution of Desired and Current Level of Happiness

Graph 7   Level of Desired and Current Happiness, By Age
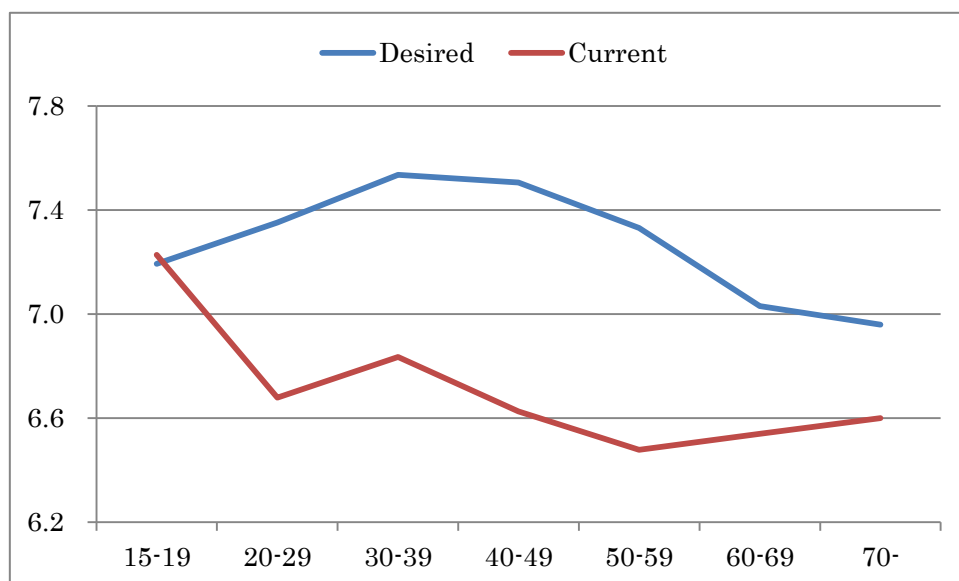
④Expected level of happiness

To the question: "What do you think about your happiness level in the future. Please score your expected level of happiness in 5 years. Score 0 if you think your happiness level will remain unchanged. If you think your happiness level will increase in relation to now, please choose the score between +1 and +5 depending on its degree (bigger number means higher level of happiness). If you think your happiness level will decrease, please choose the score between -1 and -5 (smaller number means lower level of happiness)", the average was 0.4 (Table 6). There is no difference in points by sex. Many people responded 0, suggesting they expect level of happiness will remain unchanged (Graph 8). By ages, those in their 10s, 20s, and 30s answered more than one point increase, while the average point declines as age progresses. Those in their 60s and older expect negative points (Graph 9).

Table 6 Expected Level of Happiness in 5 Years (increase from current level)

Men	0.3
Women	0.5
Total	0.4

Graph 8 Distribution of Respondents (Expected level of happiness in 5 years)
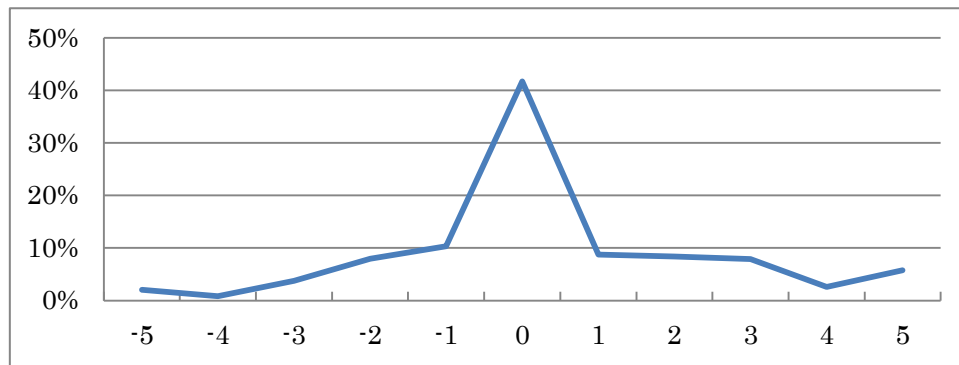
Graph 9 Expected Level of Happiness By Age
(vertical axis stands for average level of increase in happiness in 5 years)

11
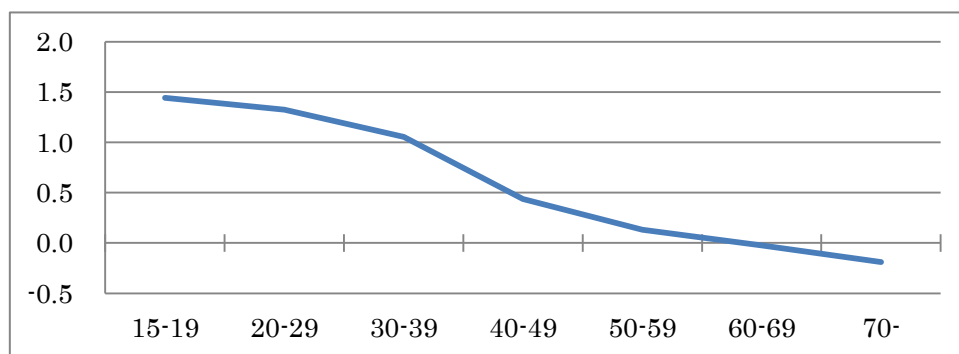
⑤Life satisfaction

To the question: " All things considered, how satisfied are you with your life as a whole these days? Please score your satisfaction between 0 (completely dissatisfied) and 10 (completely satisfied)", the average point was 6.0. This result is lower than the average point of 6.6 in the level of current happiness, which uses the same 0-10 scale (Table 7). Compared with the level of current happiness, answers in higher points decline while those in slightly lower points increase (Graph 10). By age, life satisfaction is lower through all ages than level of current happiness, with largest decline in 20s and large increase in 50s (Graph 11).

Table 7 Life Satisfaction

	average	standard deviation	no. of respondents
Men	5.6	2.3	3027
Women	6.3	2.2	3412
Total	6.0	2.3	6439

Graph 10 Distribution of Life Satisfaction and Level of Current Happiness
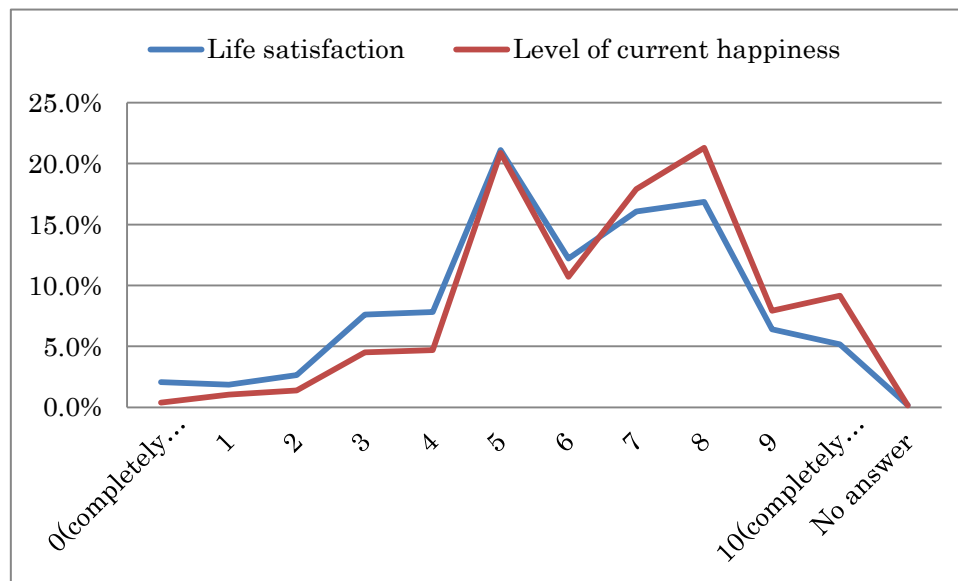
Graph 11 Life Satisfaction and Level of Current Happiness By Age
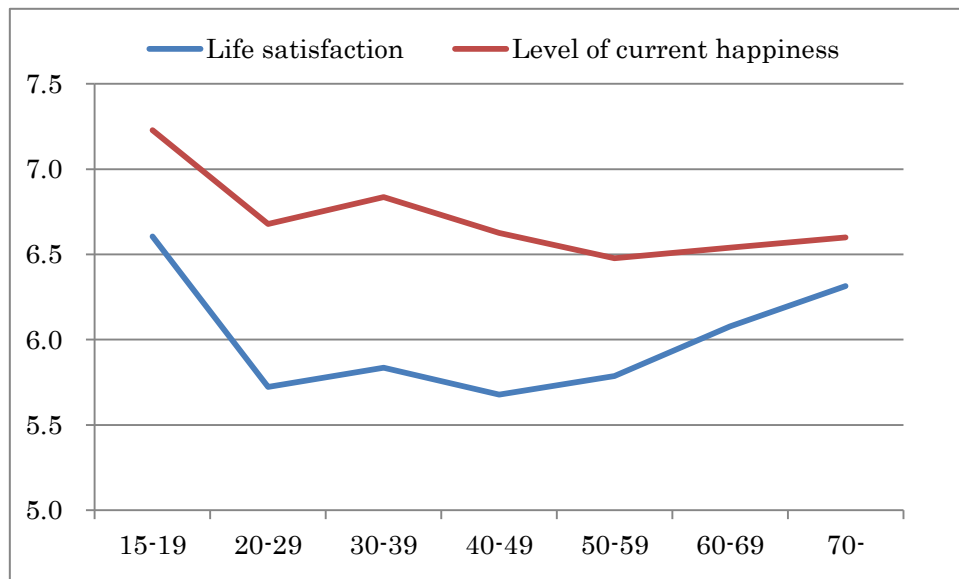
⑥Interdependent happiness

When asked about nine questions, including three components of "cooperative relativity," "moderateness," and "sense of being ordinary," with 0-10 scale, respondents answered 5.8 on average. Scores are higher to the question "Although it is quite average, I live stable life," while scores are lower to the question "I do not have any major concerns or anxieties." By sex, women's scores are higher, as they were for the question about sense of well-being (Table 8).

Table 8　Interdependent Happiness Scale, Average Points

	Men	Women	Total
I believe that I and those around me are happy.	5.1	5.7	5.4
I do not have any major concerns or anxieties	5.1	5.4	5.3
I generally believe that things are going well for me in general, as they are for others around me.	5.2	5.8	5.5
I feel I am being positively evaluated by others around me	5.3	5.7	5.5
Although it is quite average, I live stable life.	6.1	6.8	6.5
I believe that my life is just as happy as that of others around me.	5.5	6.1	5.8
I make significant others happy.	5.6	6.3	6.0
I believe I have achieved the same standard of living as those around me.	5.6	6.2	5.9
I can do what I want without causing problems for others.	5.8	6.3	6.1
Interdependent happiness scale	5.5	6.0	5.8

Table 9 shows the distribution of respondents for each question. In many questions, a large share of people chose 5.

Table 9　Distribution of Respondents to Interdependent Happiness Questions（%）

	0	1	2	3	4	5	6	7	8	9	10	No answer
I believe that I and those around me are happy.	3.2	1.7	3.6	8.4	7.5	33.7	10.9	13.1	10.7	3.3	3.3	0.5
I do not have any major concerns or anxieties	7.8	3.9	6.3	10.8	6.9	20.8	6.7	10.1	12.4	5.7	8.3	0.2
I generally believe that things are going	3.7	2.1	4.5	8.4	7.5	29.7	8.7	12.6	12.4	4.8	5.1	0.4

well for me and for others around me.												
I feel I am being positively evaluated by others around me	3.1	2.2	4.1	8.1	7.3	30.1	10.1	12.9	12.6	5.0	4.2	0.3
Although it is quite average, I live stable life.	2.5	1.8	3.0	5.4	6.6	20.2	7.8	12.1	16.1	8.9	15.4	0.2
I believe that my life is just as happy as that of others around me.	3.6	2.0	3.6	7.7	7.3	25.8	8.2	12.6	14.0	6.1	8.7	0.4
I make significant others happy.	4.4	1.9	3.1	6.6	6.3	24.2	8.6	13.2	15.2	7.8	8.4	0.4
I believe I have achieved the same standard of living as those around me.	4.3	2.5	3.8	7.8	7.4	21.8	7.7	12.5	14.3	7.1	10.4	0.4
I can do what I want without causing problems for others.	4.3	2.3	3.6	7.1	6.3	20.7	8.4	12.1	15.7	8.3	10.9	0.2
Interdependent happiness scale	0.8	1.9	3.4	6.4	11.4	21.5	15.7	16.6	12.6	6.2	2.2	1.5

*Interdependent happiness scale was calculated for each respondent as average points to all of the nine questions. Rounded points of Interdependent happiness scale are categorized to 0-10 scale in table 9.

By age, interdependent happiness scale declines at the age of 20s even more than life satisfaction and rises largely as age progresses（Graph 12）.

Graph 12　Interdependent Happiness, Level of Current Happiness, and Life Satisfaction By Age
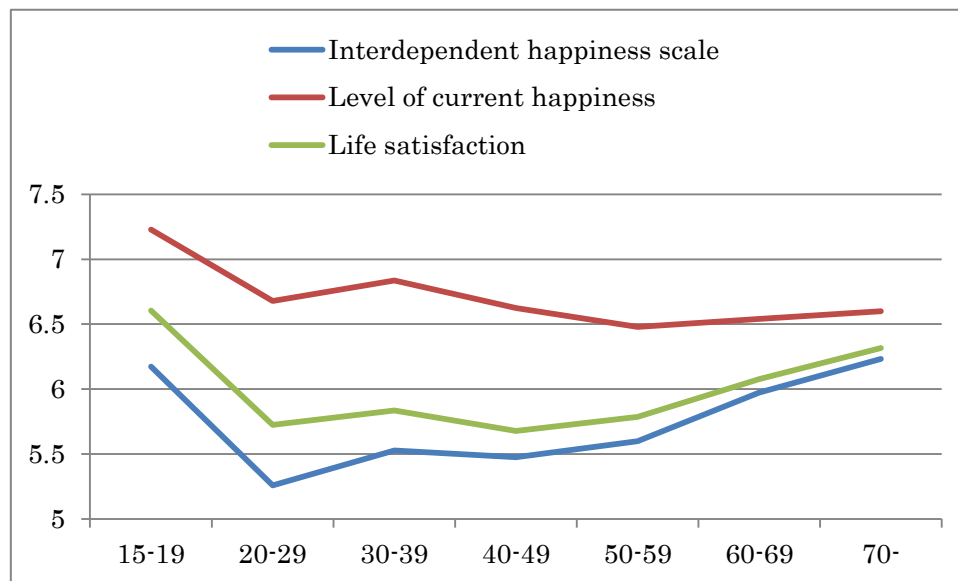
⑦Feeling of past few weeks

To the question on frequency of experienced various affects or feelings in the past few weeks, many people indicated "intimacy," "sympathy," and "kindness" as positive affects experienced often, while they raised "stress," "anxiety," and "anger" as experienced negative affects (Table 10). To facilitate comparisons, indexes of affects are constructed for each question as follows: "none" =0、"rarely" =1, "sometimes" =2, "often" =3.

The positive affect point is on average 1.8, while the negative affect point is 1.2 (Table 11). As an index of measuring subjective well-being, affect balance was calculated by subtracting negative affect points from positive affect points. The affect balance was 0.7 on average, while women recorded higher points in positive affect and men recorded higher in negative affect. As a result, affect balance was higher for women. By age, affect balance is J-shaped, with those in their 20s at the bottom (Graph 13).

Table 10 Distribution of Respondents, Experienced Affects During Past Few Weeks (%)

	often	sometimes	Rarely	none	No answer
Proud	8.1	34.1	37.8	19.1	1.0
Calm	25.2	47.6	22.4	3.8	1.0
Sympathetic	28.1	49.9	18.8	2.0	1.1
Generous	19.0	48.9	26.4	3.9	1.8
Peaceful	23.0	45.7	25.2	5.5	0.6
Kind	27.7	51.7	18.0	1.9	0.8
Intimate	28.8	48.4	19.4	2.4	1.0
Fulfilled	20.4	41.5	29.8	7.6	0.7
Satisfied	18.2	41.7	30.1	9.3	0.7
Indebtedness	10.2	23.6	39.9	25.3	0.9
Hopelessness	8.9	20.9	37.8	31.5	1.0
Sadness	8.6	23.8	43.6	23.0	1.0
Stress	26.0	33.3	30.1	9.9	0.6
Fear	6.3	17.5	35.4	39.8	1.0
Anxiety	20.6	36.2	34.5	8.1	0.6
Shame	5.9	20.5	41.5	31.0	1.1
Anger	14.1	31.1	39.9	14.1	0.8
Guilt	4.9	15.7	38.5	40.0	0.9
Ego	4.1	20.6	48.3	25.6	1.4
Jealousy	3.9	12.8	37.5	45.0	0.8
Frustration	7.9	21.0	41.5	29.0	0.7

Table 11 Affect Balance of Past Few Weeks

		average	standard deviation	No. of respondents
Men	Positive affect	1.8	0.6	2923
	Negative affect	1.2	0.6	2937
	Affect balance	0.6	0.9	2861
Women	Positive affect	1.9	0.6	3264
	Negative affect	1.1	0.6	3261
	Affect balance	0.8	0.9	3163
Total	Positive affect	1.8	0.6	6187
	Negative affect	1.2	0.6	6198
	Affect balance	0.7	0.9	6024

Graph 13 Affect Balance of Past Few Weeks By Age
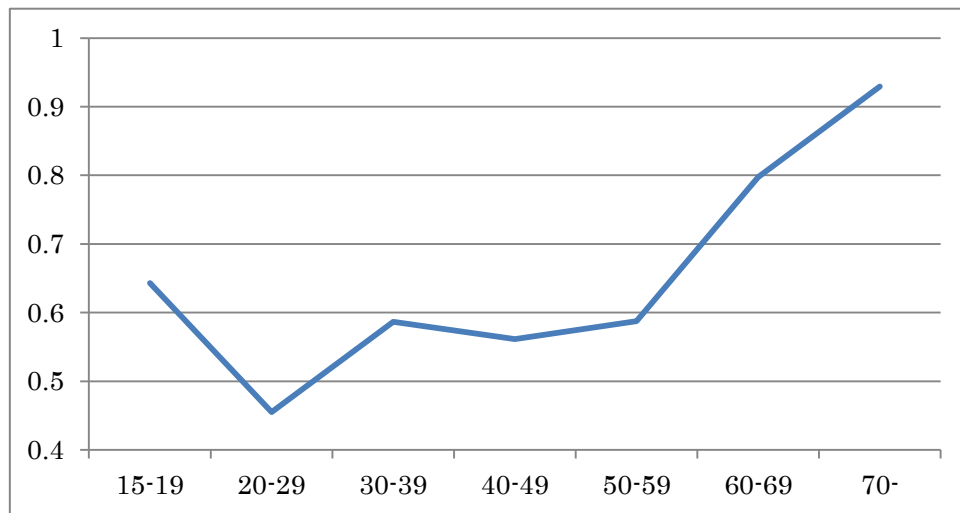
（２）Miscellaneous aspects of well-being

⑧Satisfaction with various aspects of life

To the questions on satisfaction with various aspects of life with a 0-10 scale, people responded relatively higher in "family life," and responded lower in "support system for nursing care" and "parenting support service" (Table 12). Graph 14 shows average points of level of current happiness by aspects of life. This shows that when satisfaction in each aspect of life increases, the level of current happiness increases. This suggests a close relation between them. The relation seems to be particularly strong between family life satisfaction and happiness.

Table 12 Satisfaction with Various Aspects of Life

	Men			Women			Total		
	average	s.d.	no.	average	s.d.	no.	average	s.d.	no.
Job	5.3	2.7	2486	6.0	2.6	2402	5.6	2.7	4888
Housing	6.5	2.6	3008	6.9	2.6	3372	6.7	2.6	6380
Family life	6.9	2.4	2748	7.2	2.4	3058	7.0	2.4	5806
Parenting	6.3	2.6	1678	6.7	2.4	1668	6.5	2.5	3346
Parenting support service	4.9	2.3	1515	5.3	2.3	1431	5.1	2.3	2946
Medical services	5.5	2.3	2605	5.7	2.4	2845	5.6	2.4	5450
Support system for nursing	4.9	2.2	1842	5.1	2.4	1852	5.0	2.3	3694

Graph 14 Level of Current Happiness

by Satisfaction with Aspects of Life（horizontal axis）
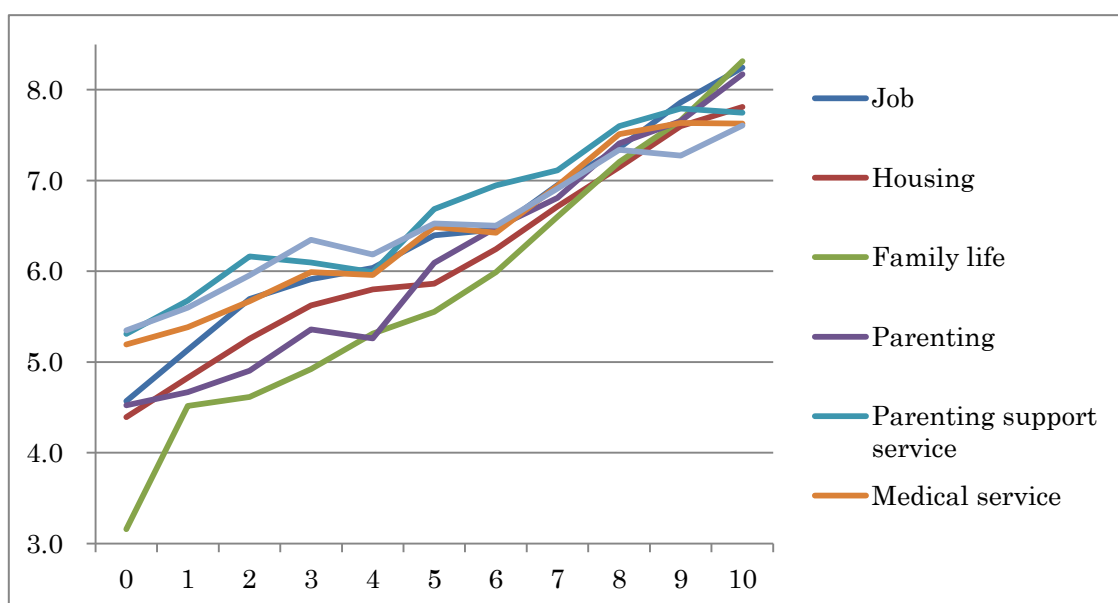
⑨Difficulty in making ends meet

To the question "When total income for your household was taken into consideration, how difficult or easy is it to manage necessary daily expenses", 34.8% of respondents answered either "very difficult," or "difficult," which exceeded the share of respondents (26.6%) who answered "very easy" or "easy" (Table 13).

By degree of difficulty in making ends meet, the level of current happiness increases as making ends meet becomes easier (Graph 15). Compared with the relation between total household income and level of current happiness (Graph 16), the relation is clearer.

Table 13 Difficulty in Making Ends Meet

	No. of respondents	Share(%)
Total	6451	100.0
Very difficult	532	8.2
Difficult	1714	26.6
No problem	2440	37.8
Easy	1408	21.8
Very easy	306	4.7
No answer	51	0.8
Difficult（total）	2246	34.8
Easy（total）	1714	26.6

Graph 15 Level of Current Happiness by Difficulty in Making Ends Meet

19
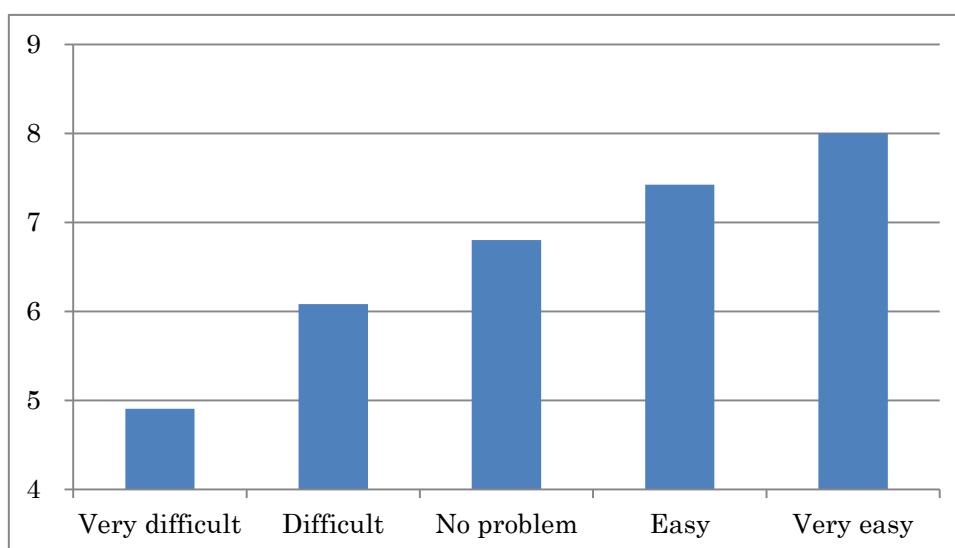
Graph 16 Level of Current Happiness by Household Income
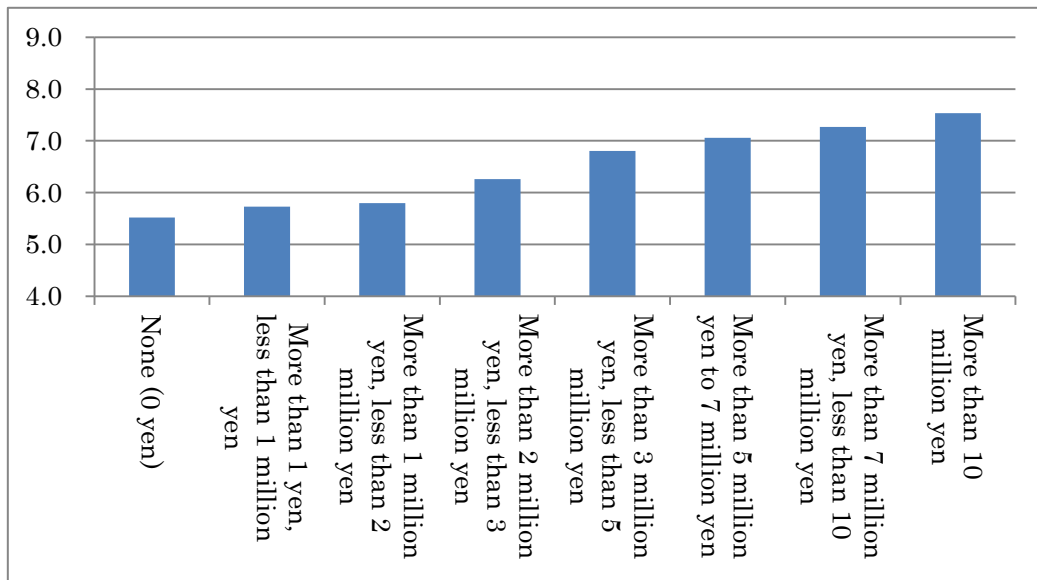
⑩Burden of housing cost

To the question "When total spending for your housing, including mortgage or rent, bills, insurance, and property taxes, is taken into consideration, how much burden is imposed on your household?", more than half of respondents answered either "very severe burden," or "burden," proving that many people feel housing cost as a burden (Table 14). By degree of burden of housing costs, the level of current happiness is higher for people who responded with a lower burden of housing costs. This suggests the existence of a relation between feeling of happiness and housing costs burden, though the relationship might be weaker than that between happiness and difficulty in making ends meet (Graph 17).

Table 14　Burden of Housing Costs

	No. of respondents	Share(%)
Total	6451	100.0
Very severe burden	1219	18.9
Burden	2493	38.6
Neither burden nor no-burden	1857	28.8
No burden	613	9.5
No burden at all	228	3.5
No answer	41	0.6
Burden	3712	57.5
No-burden	841	13.0

Graph 17 Level of Current Happiness by Burden of Housing Costs
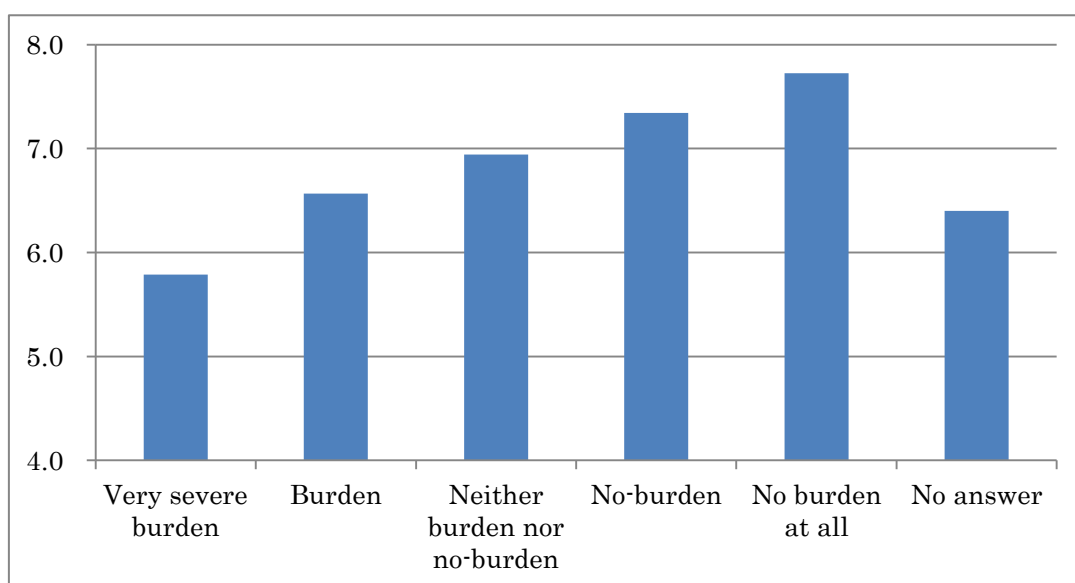
⑪Neighborhood facilities

To the questions on access to several facilities that are expected to be nearby, not a few respondents answered that they are not accessible (Table 15). Graph 18 shows that the ease of access to facilities is correlated with the level of current happiness. Lack of access to hospitals and medical facilities has a large impact on happiness (Graph 18）.

Table 15 Access to Facilities（%）

	Within walking distance, easy access	Not within walking distance, accessible by public transportation	Not accessible	No answer
Grocery stores	70.1	25.2	4.5	0.3
Shops providing daily-use products	66.4	28.5	4.7	0.4
Post offices	70.7	25.3	3.6	0.4
Banks, Credit Unions (financial facilities)	59.6	35.2	4.7	0.5
Cinemas, Theaters, Museums (cultural halls)	12.3	64.7	22.3	0.7
Public transportation (bus stops, train stations)	67.6	28.3	3.5	0.5
Hospitals, Healthcare facilities	55.3	40.4	3.9	0.4
Municipal offices	37.0	56.8	5.7	0.4
Libraries, City hall (gathering facilities)	43.6	49.2	6.7	0.5
Playgrounds (parks)	67.7	25.1	6.4	0.7

Graph 18 Level of Current Happiness by Access to Facilities
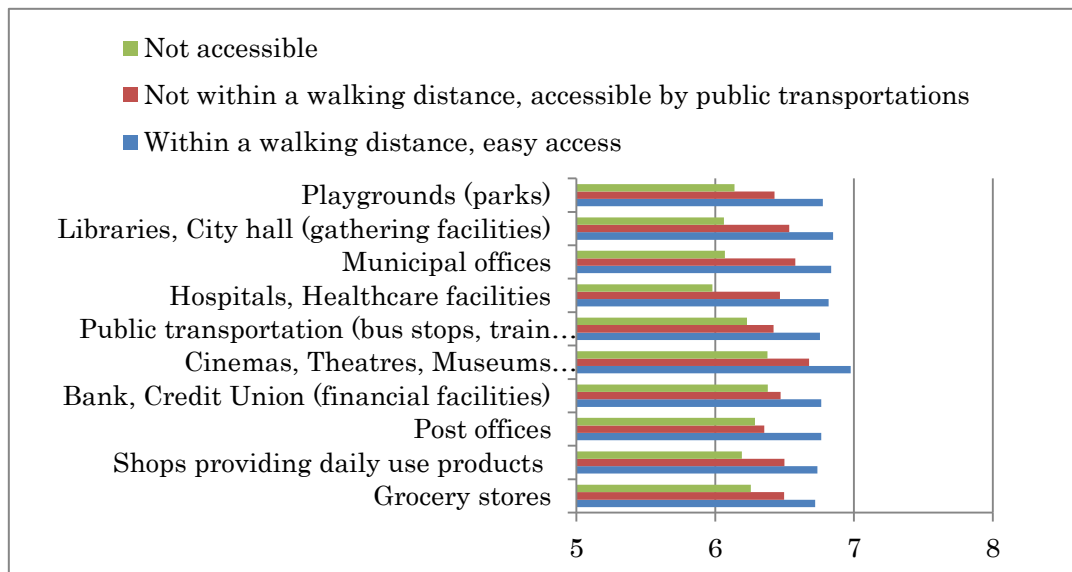
⑫Anxiety

When asked about the degree of anxiety over various issues that could cause anxiety for many people, many respondents answered that they feel anxious about "Living expenses for later in life," followed by "natural disasters," "radioactive pollution," and "future for children" (Table16). By degree of anxiety, those who are always anxious over "lonely death," "unemployment," and "*karoshi*" reported very low levels of current happiness (Graph 19).

Table 16   Degree of Anxiety Over Various Issues   (%)

	Always anxious	Sometimes feel anxious	Neither anxious nor unconcerned	Normally do not feel anxious	Do not feel anxious at all	No answer	anxious	Not anxious
Karoshi (death by overwork)	5.3	18.1	23.3	27.9	24.6	0.8	23.4	52.6
Lonely death	9.1	21.7	22.0	25.3	21.7	0.4	30.8	46.9
Unemployment	14.0	20.6	21.8	17.2	24.1	2.3	34.7	41.2
Food safety	15.1	31.9	23.5	20.7	8.2	0.6	47.0	28.9
Future for children	23.7	28.9	23.0	9.8	12.2	2.4	52.6	22.0
Safety	9.9	30.3	28.8	21.7	8.6	0.8	40.2	30.3
Natural disasters	31.8	37.1	15.9	10.6	4.0	0.5	68.9	14.6
Radioactive pollution	22.0	31.3	19.8	15.1	11.2	0.6	53.3	26.4
Living expenses for later in life (after retirement)	41.2	31.1	13.9	8.7	4.7	0.4	72.3	13.4

23

Graph 19 Level of Current Happiness by Degree of Anxiety Over Various Issues
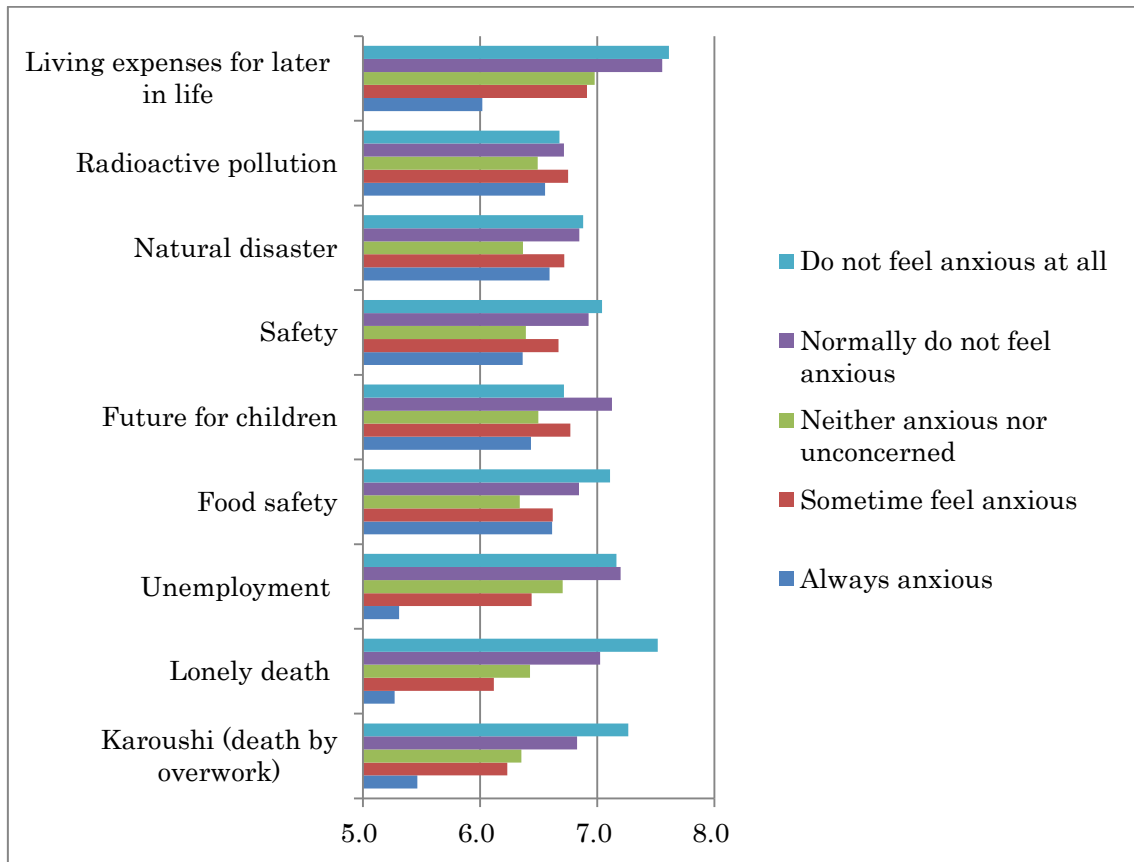
⑬Feeling of security

To the question "How safe do you feel about your neighborhood when walking alone at night?", more people responded that they feel safe than those responded they feel unsafe (Table 17). The level of current happiness is lower for both men and women when they feel unsafe (Graph 21).

Table 17 Neighborhood Security at Night

	No. of respondents	Share(%)
Total	6451	100.0
Feel completely safe	586	9.1
Feel safe	2329	36.1
Feel neither safe nor dangerous	1974	30.6
Do not feel safe	1293	20.0
Do not feel safe at all	256	4.0
No answer	13	0.2
Feel safe	2915	45.2
Do not feel safe	1549	24.0

Graph 20 Level of Current Happiness by Degree of Feeling Safe While Walking at Night
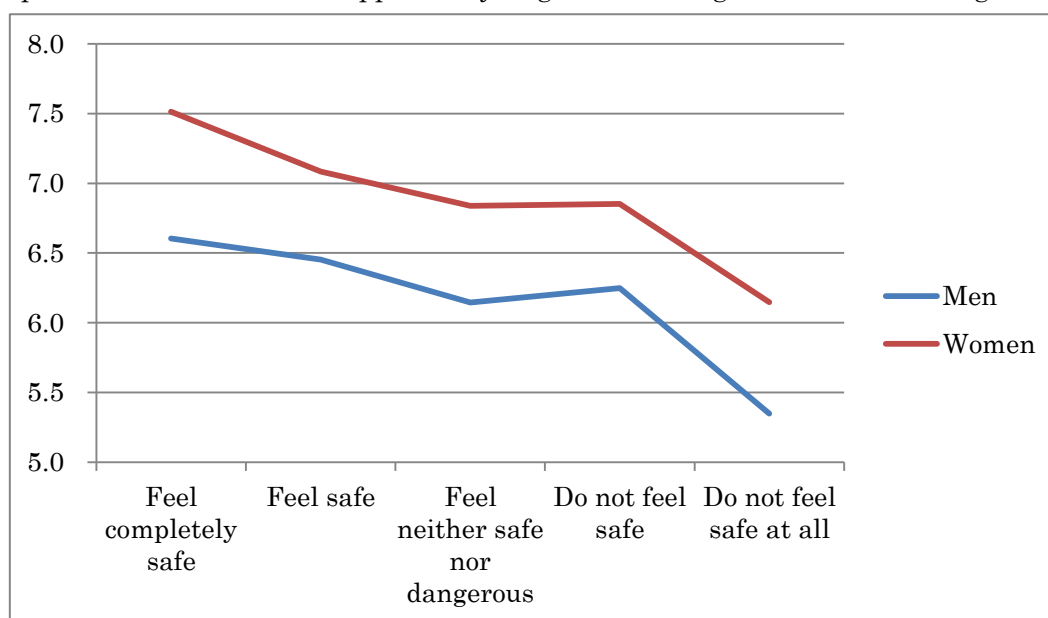
⑭Social support

To the questions asking degree of expectation in receiving social support in various situations like "He/she would cheer me up when I am feeling down," "When I have something to be happy about, he/she gets excited as if it happens to them," more than half of respondents answered that they expect to receive support (Table 18). Graph 21, which depicts level of current happiness by the degree of expectation of receiving support, shows that the higher the expectation of receiving support, the higher the level of current happiness.

Table 18 Social Support   (%)

	It is definitely not the case	It is probably not the	I am not sure	It is probably the case	It is certainly the case	No answer	It's the case	It's not the case
He/she would cheer me up when I am feeling down	2.0	5.0	26.8	43.2	22.6	0.4	7.0	65.8
When I have something to be happy about, he/she gets excited as if it happens to them.	1.8	4.9	25.5	44.4	22.8	0.4	6.8	67.3
He/she would solve the problem when I cannot do anything.	3.6	10.6	35.4	36.9	12.9	0.6	14.2	49.8
When I am feeling down, he/she would realize promptly, and take care of me.	3.2	8.4	32.6	39.3	16.0	0.5	11.6	55.3
He/she always understands how you feel.	3.1	8.9	33.5	39.0	15.1	0.5	12.0	54.0
He/she accepts you as you are including your weakness and strengths.	2.1	5.8	26.3	43.2	22.2	0.4	7.9	65.4

Graph 21 Level of Current Happiness by Social Supports in Various Situations
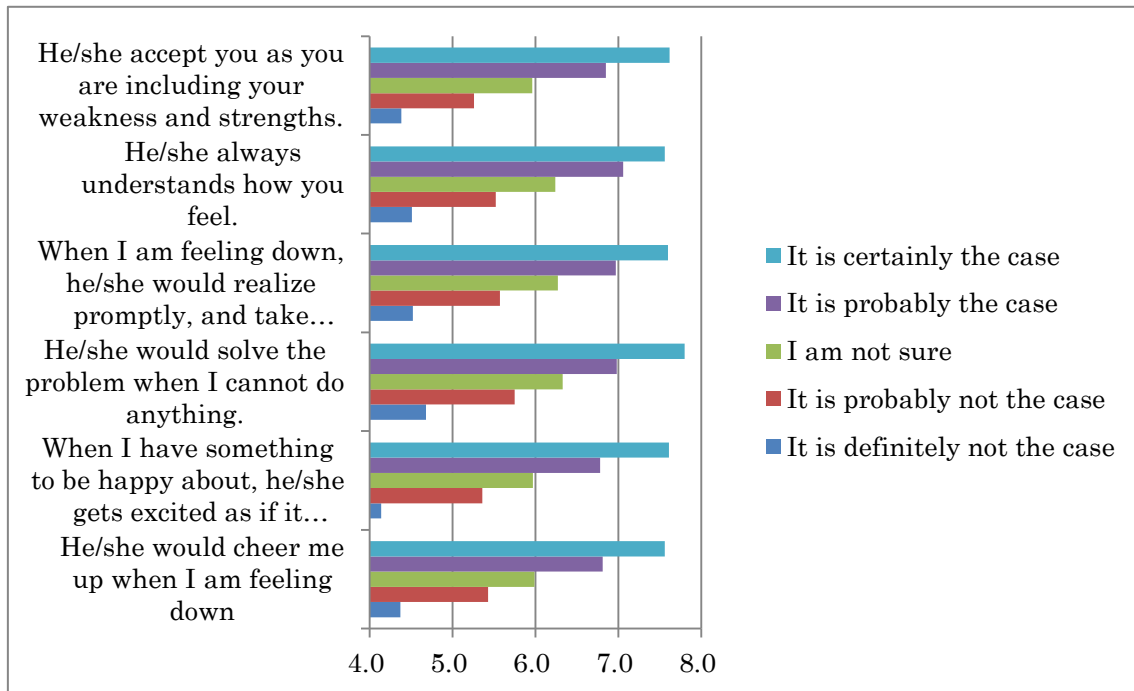
⑮Self-reported health status

The evaluation of their own health using 5-points scale shows that around 60%
respondents think they are "healthy" (Table 19). The level of current happiness declines
as the valuation of their own health declines (Graph 22).

Table 19   Self-reported Health Status

	No. of respondents	Share(%)
Total	6451	100.0
I am totally healthy	1223	19.0
I am healthy	2638	40.9
I am neither healthy nor ill	1220	18.9
I am not healthy	990	15.3
I am not healthy at all	372	5.8
no answer	8	0.1
Healthy	3861	59.9
Not healthy	1362	21.1

Graph 22 Level of Current Happiness by Self-reported Health Status
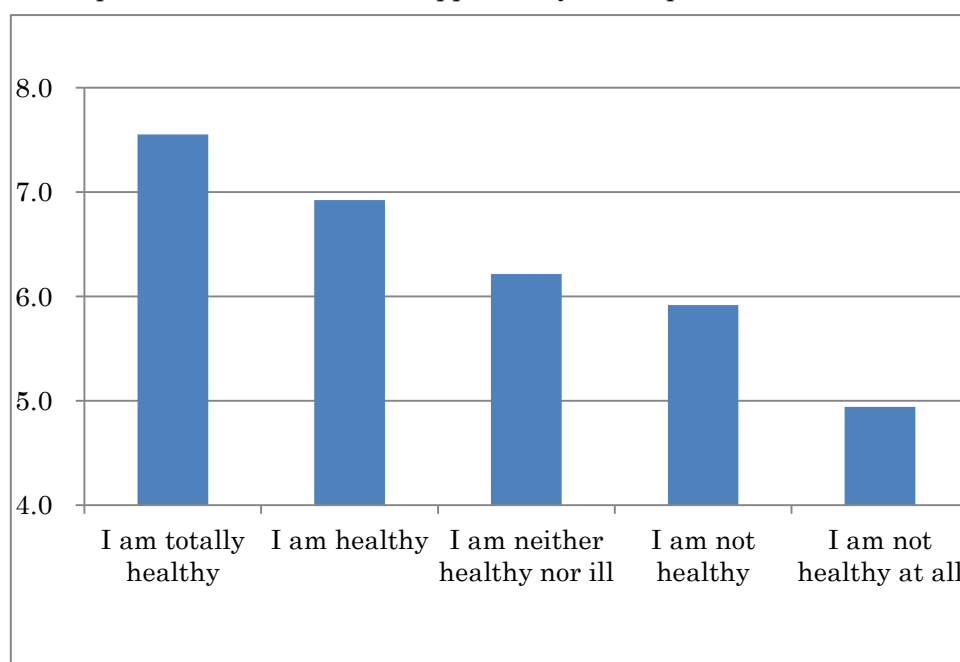
⑯Status in household

In this survey, more than half of the respondents answered that they are heads of households (Table 20). The level of current happiness is relatively lower for head of households, which might be a result of single-person households that contain just heads of households with low level of happiness because of the size of households (Graph 23).

Table 20 Status in Households

	No. of respondents	Share(%)
Total	6451	100.0
Household head	3349	51.9
Partner	1757	27.2
Child	1085	16.8
Grand child	38	0.6
Parent	102	1.6
Parent-in-law	24	0.4
Grandparent	3	0.0
Grandparent-in-law	4	0.1
Sibling	21	0.3
Sibling-in-law	5	0.1
Other relative	12	0.2
No answer	30	0.5

Graph 23 Level of Current Happiness by Status in Households
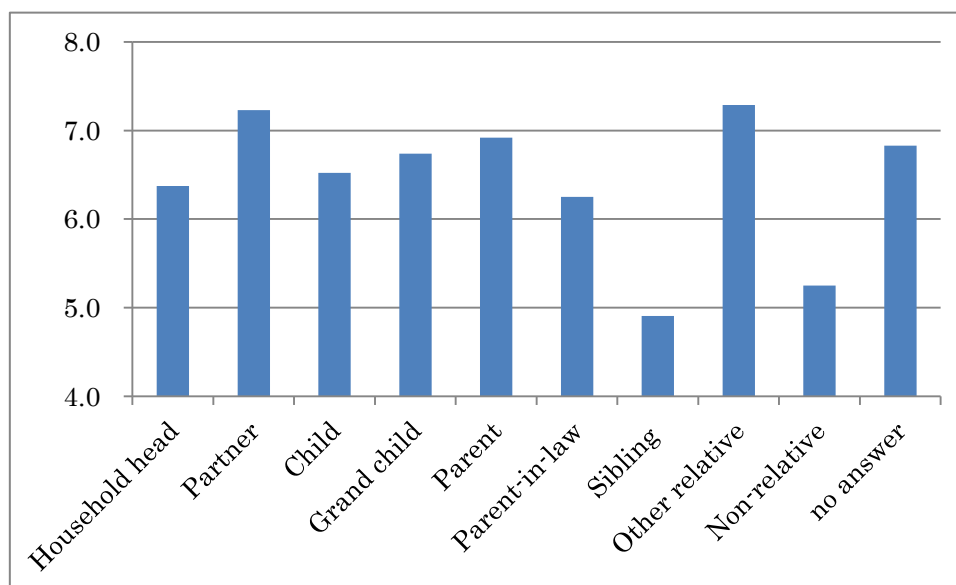
(Graph 23 excludes status data with very few samples)

29

⑰Size of households

The average number of persons in a household was 3.1 in this survey. This value is larger than data of Census 2010 in Japan, which reported 2.4 persons in a household. Two-person households are the highest in number (Table 21). While it is clear that single-person households reported the lowest level of current happiness, the relationship between level of current happiness and size of the household other than single households is not very clear, (Graph 24).

Table 21 Size of Households

	No. of respondents	Share(%)
Total	6451	100.0
1 person	1085	16.8
2 persons	1590	24.6
3 persons	1302	20.2
4 persons	1277	19.8
5 persons	620	9.6
more than 6	505	7.8
No answer	72	1.1

Graph 24 Level of Current Happiness by Size of Household
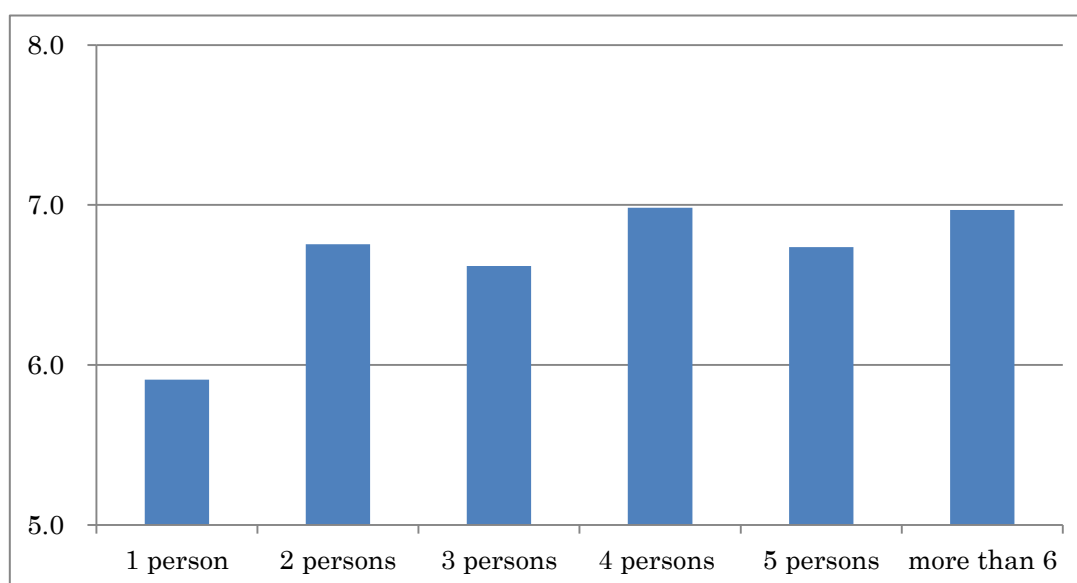
⑱Number of children

About 70% of respondents in the survey have children (Table 22). Current level of happiness is lowest for those who answered are without children. The current level of happiness seems to increase as number of children increases (Graph 26).

Table 22 Number of Children of Respondents

	回答者数	構成比(%)
Total	6451	100.0
1	902	14.0
2	2442	37.9
3	986	15.3
4	127	2.0
5	49	0.8
No child	1881	29.2
No answer	64	1.0
With child	4506	69.8

Graph 25 Level of Current Happiness by Number of Children
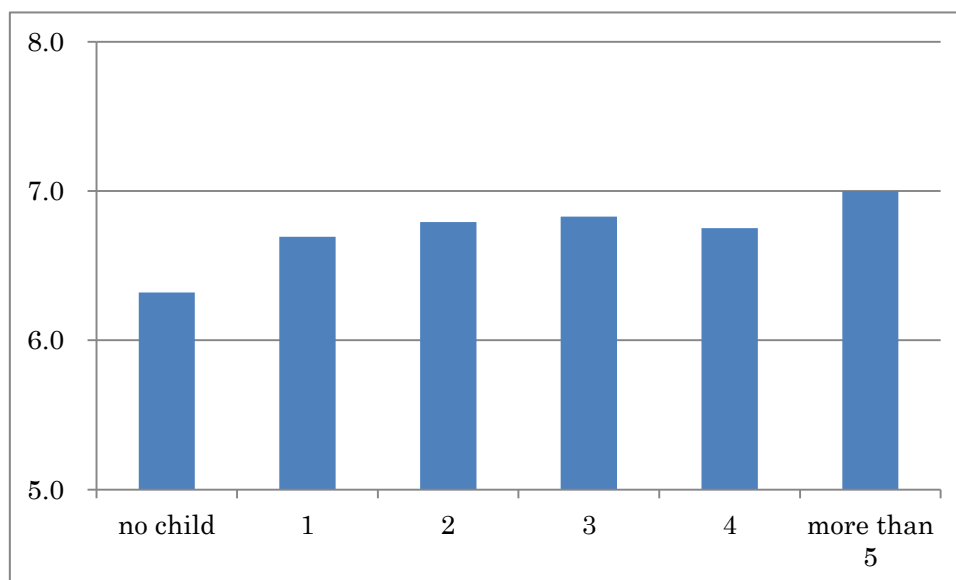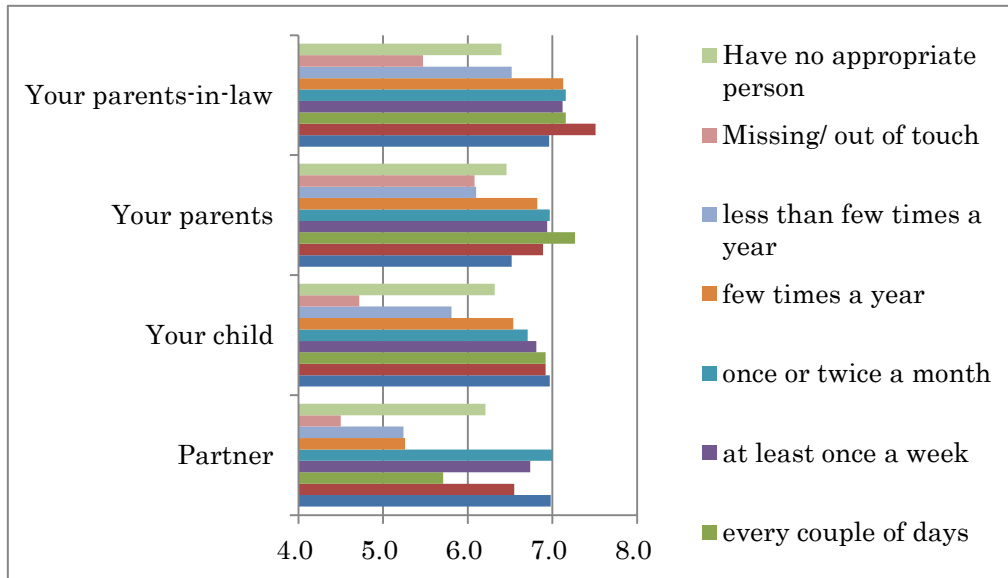
⑲Frequency of social contacts（face-to-face）

To the questions on frequency of seeing intimate people face-to-face, most respondents answered that they "live together" with partners or "have no partners," while around 10% of respondents see parents or children "once or twice a month" and others, also around 10%, see them "a few times a year" (Table 23). Many respondents see their sibling (who do not live together) "few times a year". Many people see their friends "once or twice a month" or "a few times a year." Around 10% of respondents answered they "have no appropriate person" to see as friends. About 90% of respondents answered that "they have no appropriate person" to the question of asking social contacts with a boyfriend/girlfriend, while many of those who have appropriate person answered that they see "at least once a week."

In terms of level of current happiness, a decline in contacts with children is associated with a decrease in level of current happiness, while a decline in contacts with parents causes a decline in level of current happiness only after the frequency declines to less than once or twice a month. Living together with parents also causes a slight decrease in level of current happiness (Graph 26). While the relation between contacts with partners and level of current happiness is complicated, it might be caused by the scarcity of respondents whose answer were neither "living together" nor "have no appropriate person."
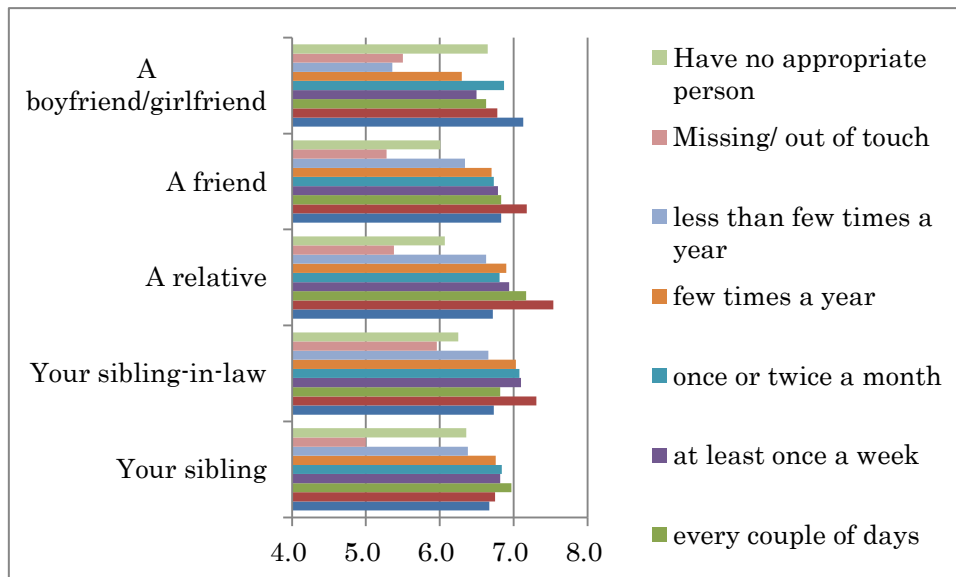
Table 23 Frequency of Social Contacts （%）

	Living together	Everyday	Every couple of days	At least once a week	Once or twice a month	Few times a year	Less than few times a year	Missing out of touch	Have no appropriate person	no answer
Partner	55.7	0.2	0.1	0.3	0.3	0.3	0.3	0.1	39.0	3.8
Your child	32.8	3.9	2.8	5.1	9.9	9.8	2.4	0.4	29.1	3.7
Your parents	21.1	3.4	2.5	4.8	11.8	11.6	3.1	0.2	30.4	11.0
Your parents-in-law	4.1	1.1	1.0	2.4	8.2	12.1	4.7	0.3	58.7	7.5
Your sibling	8.7	1.9	2.3	4.6	17.3	34.3	14.3	0.8	12.2	3.6
Your sibling-in-law	0.2	0.6	0.9	1.9	8.7	27.5	16.9	0.8	39.7	2.8
A relative	2.5	0.7	0.8	1.7	7.6	32.6	35.3	1.0	15.2	2.4
A friend	0.1	6.7	9.1	12.0	26.0	23.7	10.0	0.5	10.2	1.6
A boyfriend/girlfriend	0.5	0.8	1.4	2.2	1.8	0.5	0.3	0.1	90.1	2.3

Graph 26-1 Level of Current Happiness by Frequency of Social Contacts
(partners, children, parents)

Graph 26-1 Level of Current Happiness by Frequency of Social Contacts
(siblings, relatives, friends, boyfriends/girlfriends)

⑳Frequency of social contacts（telephone, letters, emails, etc.）

Frequency of social contacts through telephone, letters, or email was also surveyed. It proved that frequency does not rise dramatically, while a slight increase was observed. However, many of those who have boyfriends/girlfriends make contacts with them every day through telephone, letters, or e-mail (Table 24).

Table 24 Frequency of Social Contacts Through Telephone, Letters or Emails　　(%)

|	Living together	Everyday	Every couple of days	At least once a week	Once or twice a month	Few times a year	Less than few times a year	Missing out of touch	Have no appropriate person	no answer
Partner	55.7	0.3	0.2	0.2	0.2	0.2	0.1	0.1	39.0	4.0
Your child	32.8	3.7	5.0	6.9	11.5	4.5	1.4	0.4	29.1	4.6
Your parents	21.1	2.0	3.7	6.5	12.9	6.3	4.4	0.2	30.4	12.3
Your parents-in-law	4.1	0.7	1.0	2.2	6.9	8.6	9.8	0.3	58.7	7.8
Your sibling	8.7	1.2	3.2	6.3	20.8	28.6	13.7	0.8	12.2	4.5
Your sibling-in-law	0.2	0.3	0.8	1.5	8.9	21.4	22.9	0.8	39.7	3.4
A relative	2.5	0.2	0.7	1.6	7.5	25.5	42.6	1.0	15.2	3.2
A friend	0.1	6.1	12.4	13.5	25.7	18.8	10.4	0.5	10.2	2.2
A boyfriend/girlfriend	0.5	3.6	1.3	1.0	0.6	0.1	0.3	0.1	90.1	2.3

㉑Social network support (number of people you can count on in case of trouble)
To the question, "How many family members, relatives, or friends do you have who would help you when you are in trouble?", many respondents answered that they can count on more than one person in each category except "others" (Table 25).   More than 30% of respondents answered that they have no neighbors who would support them in case of trouble. Graph 27 shows the clear correlation between level of current happiness and number of people one can count on.

Table 25 Number of People Respondents Can Count on in Case of Trouble   (%)

	1 person	2 persons	3 persons	4 persons	5 persons	more than 6	none	no answer
Parents or parents-in-law	15.4	23.4	9.0	10.7			37.9	3.6
Family or relatives (except parents)	7.1	17.5	14.1	11.7	7.8	30.3	9.6	1.9
Friends	8.8	16.6	16.4	6.8	6.9	24.1	17.5	2.9
Neighbors	8.9	17.4	11.4	5.9	4.0	13.2	36.0	3.2
Others	5.3	6.7	5.7	2.2	2.0	12.8	55.2	10.1

Graph 27 Level of Current Happiness by Number of People Respondents Can Count on
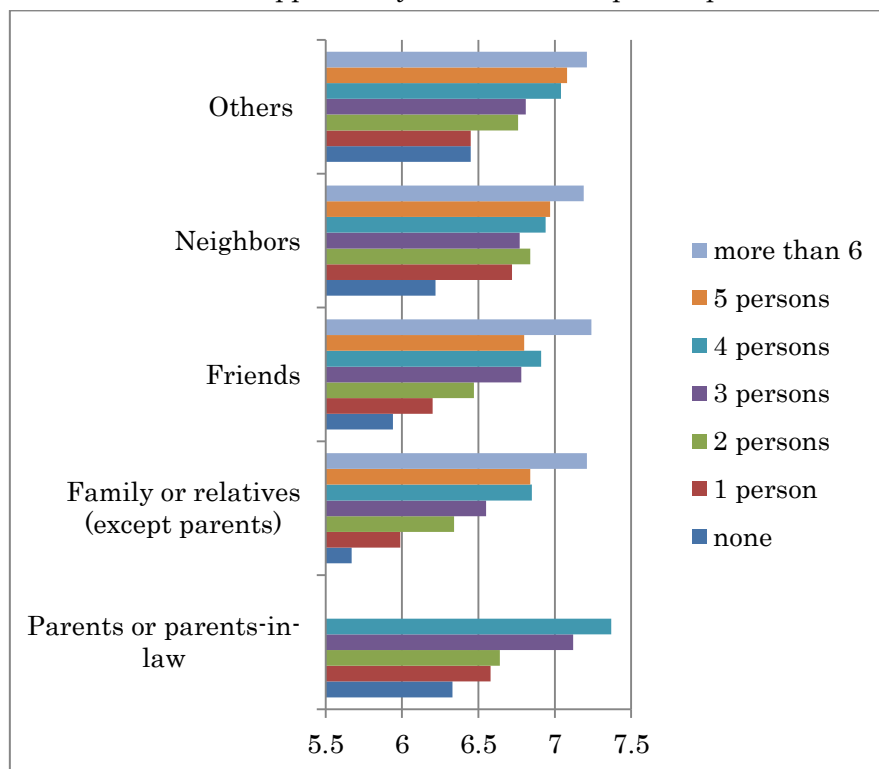
㉒Nursing care

To the question "Do you have family members and relatives who are a bedridden patient, and you or someone who live with you are the main caregiver?", about 18% answered they have at least one patient who is certified as Needed Long-Term Care (Table 26). The share of respondents who have a bedridden patient exceeded 6%. In terms of relation between the level of current happiness and nursing care, the level of current happiness is slightly low for those who live together with a patient certified as Needed Long-Term Care, while the level of current happiness is slightly high for those who have a patient certified as Needed Long-Term Care but do not live together with them (Graph 28).

Table 26 Share of Respondents Who Have Family Members Who Are Bedridden, etc. (%)

	Do not have	Living with a patient	Not living with a patient	no answer
A patient who are certified as the Needed Long-Term Care	80.9	5.8	12.0	1.3
A bedridden patient	91.4	2.0	4.6	2.0
A patient under the medical care	81.9	6.1	10.0	2.0
A patient who are certified as the disabled	82.6	6.4	8.9	2.1

Graph 28 Level of Current Happiness by Family Member's Conditions
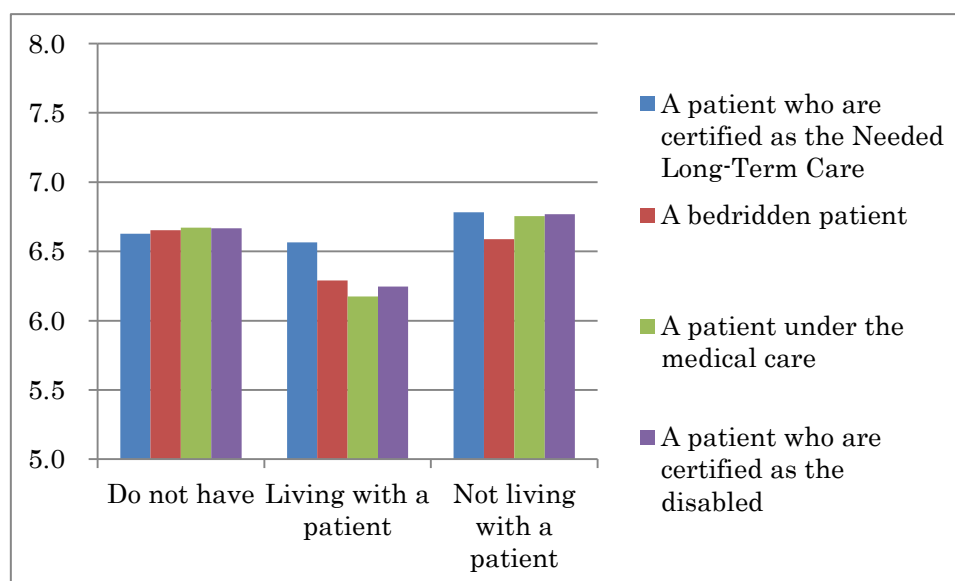
㉓Burden of nursing care

In addition to the above question, the survey asked "How strong of a sense of burden are you feeling about the nursing?" Respondents who answered they feel a strong sense of burden are twice as many as those who answered they feel weak sense of burden. Around 20% of respondents answered they feel "very strong" sense of burden (Table 27). While the level of current happiness is low for those who feel a strong sense of burden, those who feel "weak sense of burden" or "not at all" responded higher for level of current happiness than that of "do not have" (Graph 29).

Table 27 Sense of Burden of Nursing Care

	No, of respondents	Share(%)
Total	2003	100.0
Very strong	405	20.2
Strong	644	32.2
Neither strong nor weak	372	18.6
Weak	348	17.4
Not at all	191	9.5
No answer	43	2.1
Strong	1049	52.4
Weak	539	26.9

Graph 29　Level of Current Happiness by Sense of Burden of Nursing Care
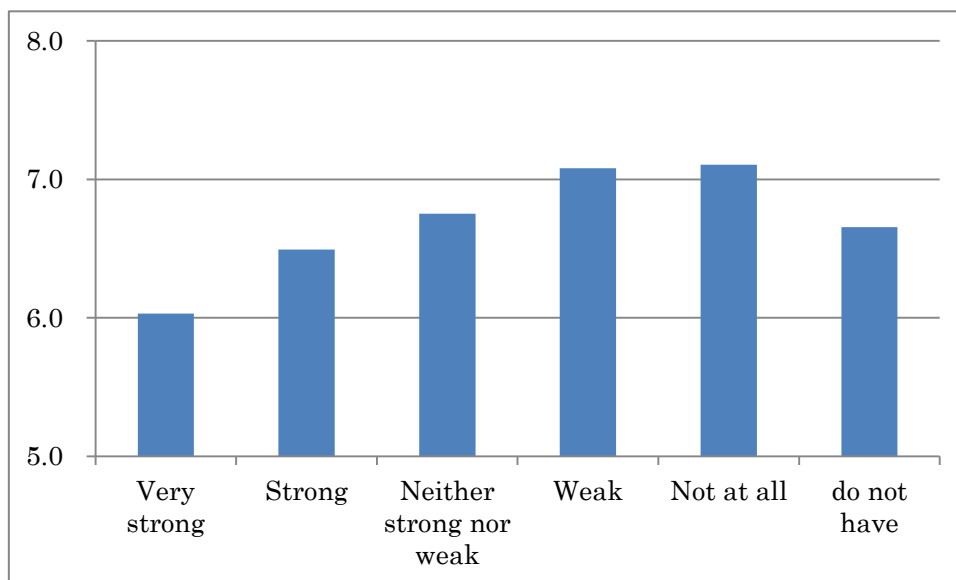
㉔Educational attainment

To the question on educational attainment, 92.3 % of respondents answered they have graduated, while 5.3% answered they are at school and 5.6% answered they dropped out (Table 28). High school graduates are the largest with the share of 36% of respondents, followed by college graduates with the share of 17.3%. In terms of the relation between the educational attainment and level of current happiness, respondents with higher degree answered with a higher level of current happiness, while dropouts of higher degrees do not necessarily respond to a higher level of current happiness (Graph 30).

Table 28 Educational Attainment of Respondents

	No, of respondents	Share(%)
Total	6451	100.0
Elementary school graduates	97	1.5
Junior high school students	42	0.7
Junior high school dropouts	10	0.2
Junior high school graduates	772	12.0
High school students	160	2.5
High school dropouts	177	2.7
High school graduates	2334	36.2
Vocational school students	27	0.4
Vocational school dropouts	65	1.0
Vocational school graduates	741	11.5
Junior/technical college students	6	0.1
Junior/technical college dropouts	17	0.3
Junior/technical college graduates	521	8.1
College (include old system) students	99	1.5
College dropouts	85	1.3
College graduates	1117	17.3
Master course students	5	0.1
Master course dropouts	4	0.1
Master course degree	93	1.4
PhD students	1	0.0
PhD dropouts	3	0.0
PhD degree	16	0.2
Others	18	0.3
No answer	41	0.6
Students	340	5.3
Dropouts	361	5.6
Graduates/Degree	5691	92.3

Graph 30　Level of Current Happiness by Educational Attainment
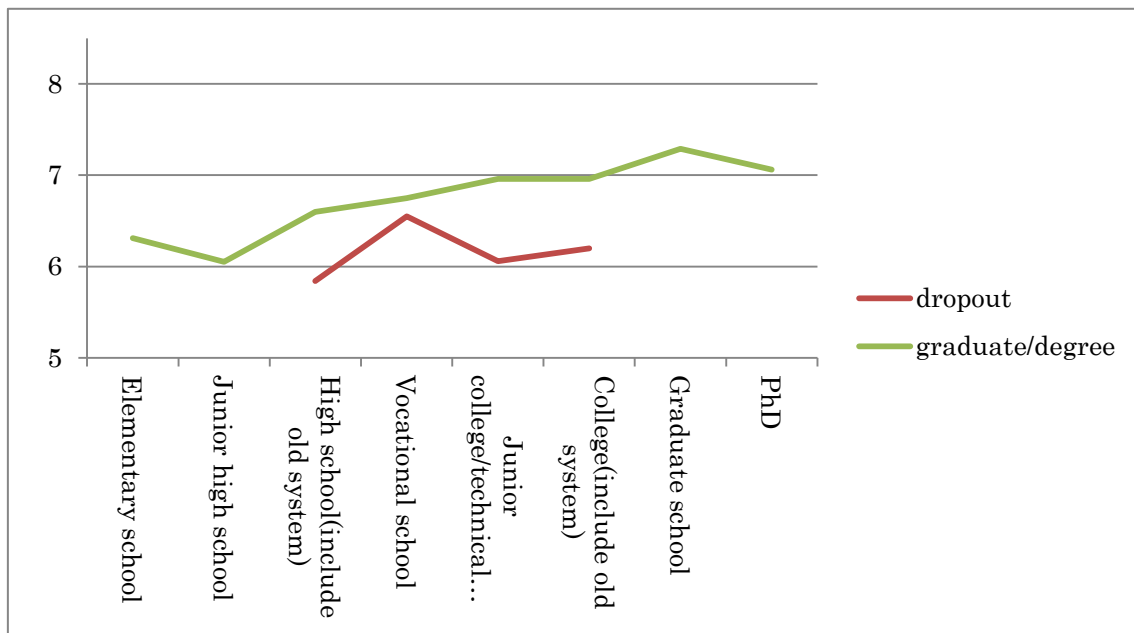
（NB: Junior high school dropouts, master course dropouts, PhD course dropouts are excluded because of data scarcity）

㉕Social security benefits

To the questions asking if they receive any social security benefits, 92% respondents answered no (Table 29). Because the questions allow multiple answers, the total number of answers exceeds 100%.

As for the level of current happiness by type of social security benefits respondents receive, those who receive public assistance benefits reported very low levels of current happiness (Graph 31). On the other hand, those who receive child care leave responded with very high level of current happiness.

Table 29 Type of Social Security Benefits

	No. of respondents	Share(%)
Total	6451	100.0
Unemployment benefit	135	2.1
Employed insurance payments	137	2.1
Public assistant benefit	61	0.9
Disabled benefit	97	1.5
Child care leave benefit	27	0.4
Sickness leave benefit	77	1.2
Single parent benefit	73	1.1
Nothing	5932	92.0
Total number of responses	6539	101.4

Graph 31 Level of Current Happiness by Social Security Benefits Received
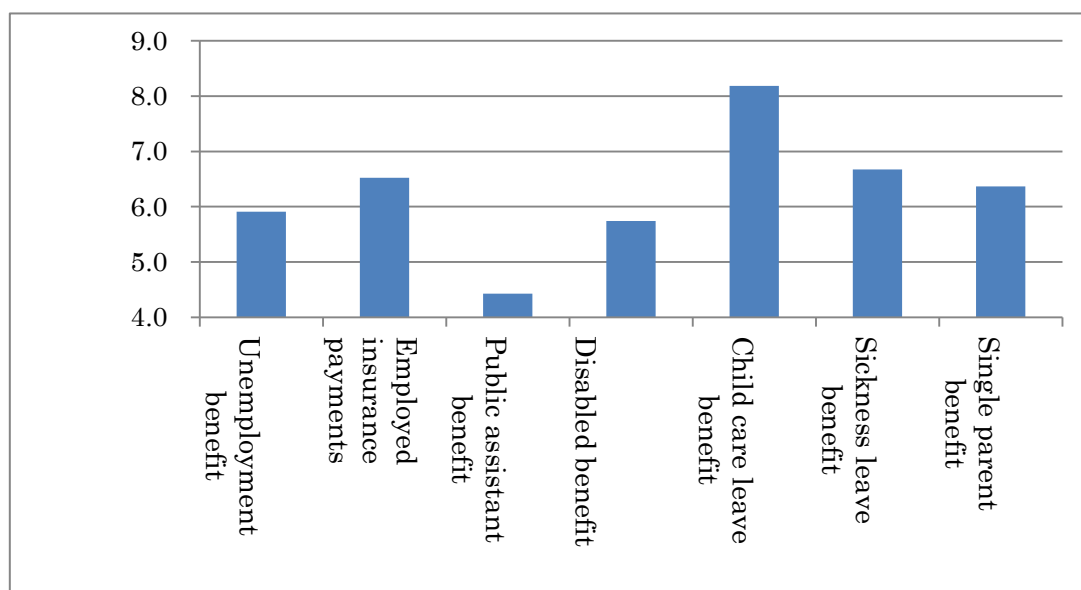
（3）Summary value in disaster area

㉖Level of current happiness

Comparing data on level of current happiness between disaster areas and non-disaster areas, it is found that respondents answered with slightly lower-than-average happiness in disaster areas. They were relatively thin high points answers, and thick low points answers (Table 30)(Graph 32).

Table 30 Level of Current Happiness in Disaster and Non-disaster Areas

|	average	Standard deviation	No. of respondents
Non-disaster are	6.7	2.1	5816
Disaster area	6.5	2.0	626
Total	6.6	2.1	6442

Graph 32 Distribution of Current Level of Happiness
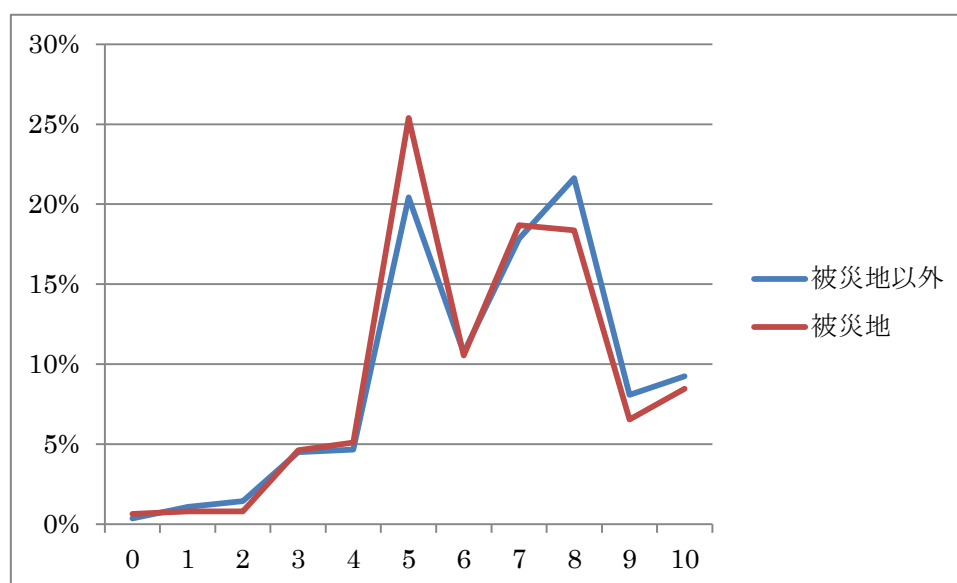
㉗Anxiety

Degree of anxiety over various issues calculated for disaster areas and non-disaster areas shows that the differences between the two area are not evident on issues like "*karoshi* (death from overwork)," "lonely death," and "unemployment" (Graph 33-1), while the degree of anxiety is clearly stronger in the disaster areas on the issues of

"natural disaster," "radioactive pollution," "future for children," "food safety," "living expenses for later in life (after retirement)"(Graph 33-2).

Graph 33-1 Differences in Anxiety Between Disaster Areas and Non-disaster Areas
　(Death from overwork, lonely death, unemployment, safety)
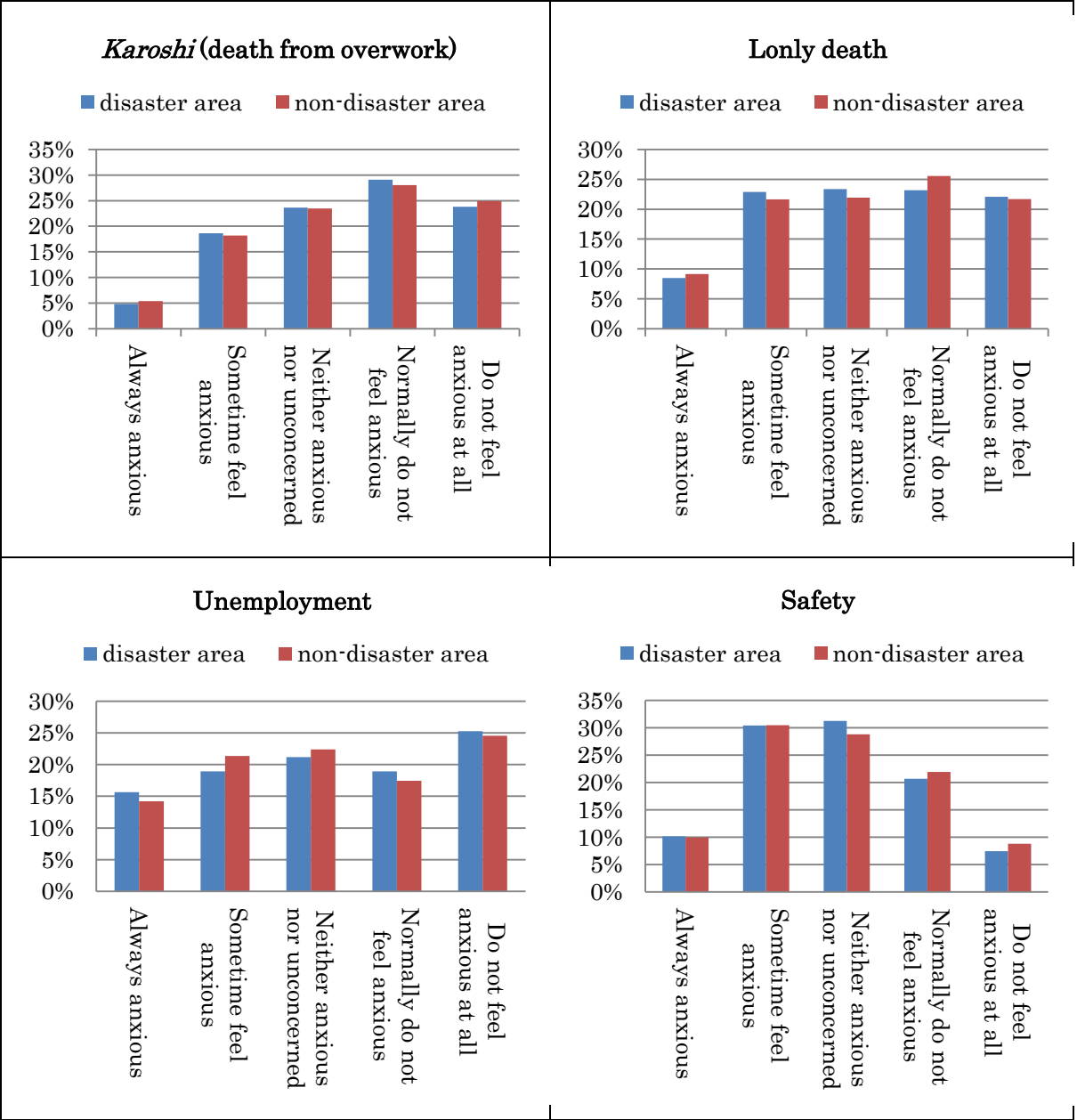
Graph 33-2 Differences in Anxiety Between Disaster Areas and Non-disaster Areas
(Radioactive pollution, natural disaster, food safety, future for children, etc.)

Radioactive pollution

Natural disaster

Food safety

Future for children

Living expenses for later in life
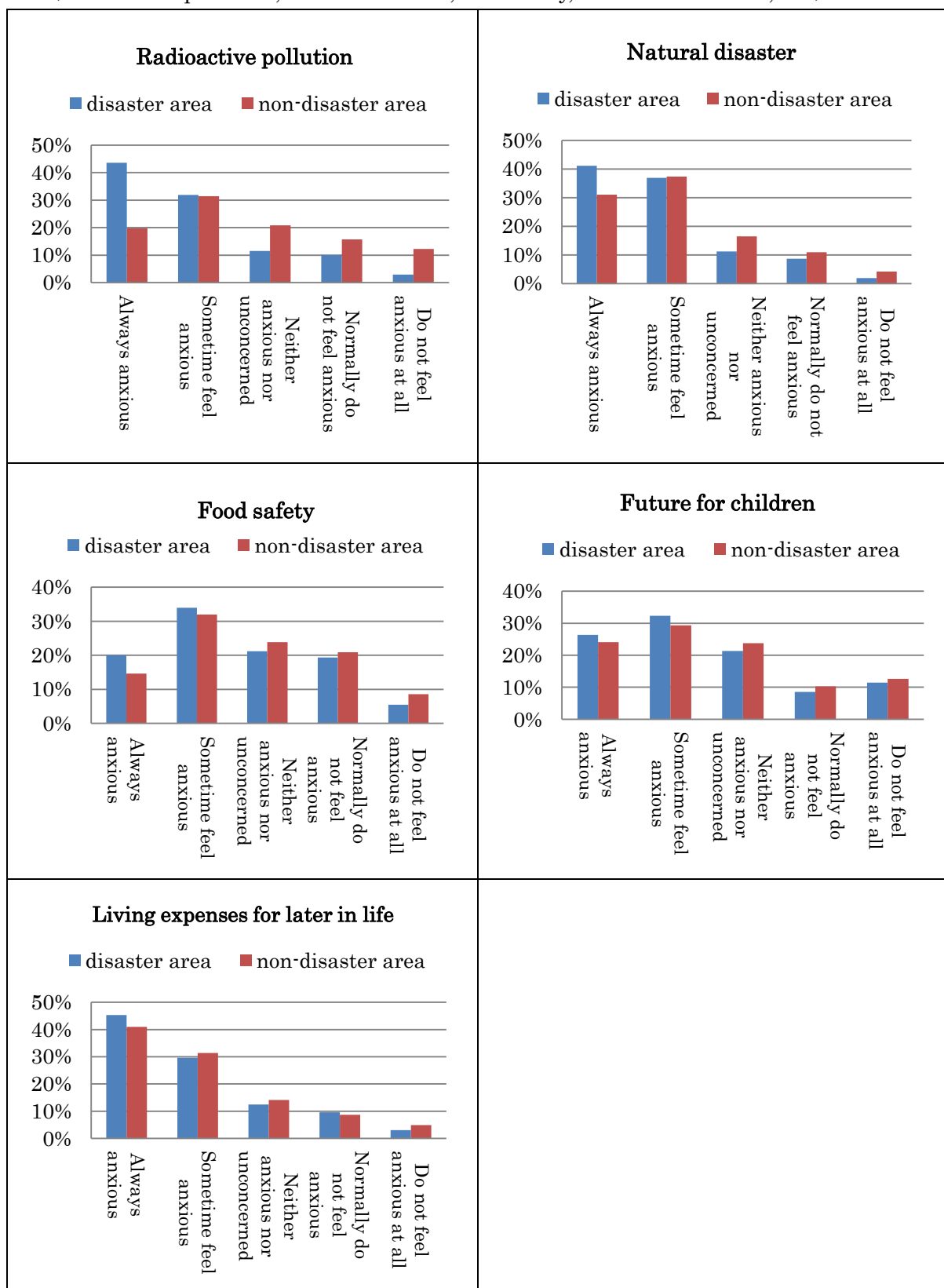
Annex

<div align="center">Differences in Simple Aggregation and Weight Back Estimate</div>

To enhance comparisons with objective data such as the Family Income and Expenditure Survey, the sampling of this survey is not proportional to the population, but at least provides samples for each prefecture. As such, bias of data is expected with the relatively large number of samples in small prefectures. To identify the size of the bias on the aggregated data caused by this procedure, weight back estimates of the level of current happiness are calculated using regional weights. The table below shows the difference between simple aggregation and weight back estimates. The difference of average level of current happiness is just 0.02. Based on this finding, just for the purpose of initial investigations to show basic characteristic of the data set, we conclude that publishing the simply aggregated data is sufficient.

<div align="center">Differences in Estimate of Average Level of Current Happiness Between Simple Aggregation and Weight Back Aggregation</div>

	Simple aggregation	share(%)	Weight back aggregation	share(%)
Total	6451	100.0	41585	100.0
0 (Very unhappy)	25	0.4	136	0.3
1	67	1.0	435	1.0
2	89	1.4	627	1.5
3	291	4.5	1781	4.3
4	303	4.7	2097	5.0
5	1347	20.9	8392	20.2
6	690	10.7	4355	10.5
7	1155	17.9	7619	18.3
8	1373	21.3	8951	21.5
9	511	7.9	3384	8.1
10 (Very happy)	591	9.2	3750	9.0
No answer	9	0.1	58	0.1
Average points		6.64		6.66