World Medical and Health Policy

What Makes Super-Aged Nations Happier? Exploring Critical Factors of Happiness Among Middle-Aged Men and Women in Japan

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This study aimed to examine multiple factors associated with happiness from the perspective of gender difference among a middle-aged Japanese population. A total of 865 participants (male = 344, female = 521) aged 40–64 years were divided into two groups (high and low) by their self-reported level of happiness. Logistic regression analysis by gender was carried out. In men, high levels of happiness were significantly correlated with living with spouse, occupation, enough sleep, leading a normal life, and regular checkups; while low levels of happiness were significantly correlated with smoking and having two or more diseases. In women, low levels of happiness were significantly correlated with caring for a family member. Our data suggested that the factors relevant to happiness levels might vary between men and women among middle-aged people in Japan. To increase the nation's level of happiness, the Japanese government must implement extended social services and policymaking, to alleviate caregivers' burdens, especially among Japanese women.

KEY WORDS: happiness, subjective well-being, gender policy, middle-age, family caregiver

Introduction

Health factors related to well-being such as happiness have been used as an index to evaluate positive outcomes of individuals' lives in many countries. The Kingdom of Bhutan was the first country to formally adopt individuals' happiness as its principal goal, labeling it "Gross National Happiness (GNH)," and this idea has influenced some developed countries such as France and the United Kingdom (Bok, 2010). Furthermore, the Organization for Economic Cooperation and Development (OECD) has recommended assessing national well-being alongside more traditional economic measures to help governments create an innovative policy that improves the lives of its citizens (OECD, 2013a, 2013b, 2014). France's report by the "Commission on the Measurement of Economic Performance and Social Progress" also stated that "national statistical agencies should incorporate questions on subjective well-being in their standard

surveys to capture people's life evaluations, hedonic experiences and life priorities" (Stiglitz, Sen, & Fitoussi, 2008). Thus, higher levels of happiness have been recognized as a positive health factor that improves a sense of well-being, sleep quality, and general work productivity.

Using happiness as a health index has become a common method to assess the progress of nations effectively. Measurement of subjective well-being (SWB) has been identified as a recommended evaluation tool for well-being (OECD, 2013b; The Commission on Measuring Well-Being, Japan, 2011). Generally speaking, the SWB consists of two main components: (i) the cognitive component includes an individual's life satisfaction such as evaluations of one's life according to subjectively determined standards and (ii) the affective component is likely to associate with psychological factors for one's own situation or health (Diener, 1984; Schimmack, Radhakrishnan, Oishi, & Dzokoto, 2002). Each country or local government measures various aspects of well-being. Despite increased awareness of well-being as an important life quality, the most recent trend among Japanese citizens has illustrated lower levels of SWB than other countries (Diener, Helliwell, & Kahneman, 2010; OECD, 2013a; The Commission on Measuring Well-Being, Japan, 2011), especially the affective dimension was lower relative to the cognitive dimension such as life satisfaction in Japan (Ohtake, Shiraishi, & Tsutsui, 2010).

The Gallup-Healthways State of Global Well-Being (2014) Country Well-Being Rankings, which measure well-being across five elements (purpose, social, financial, community, and physical) ranked Japan 92nd out of 145 countries. While Japan ranked 11th for financial well-being, the other four categories of well-being were far lower (87th, 127th, 86th, and 135th, respectively). The World Happiness report using the Cantril Self-Anchoring Striving Scale (Cantril, 1965) measuring SWB also ranked Japan 51st out of 155 countries (Helliwell, Layard, & Sachs, 2017). Furthermore, the World Database of Happiness, which assesses life-satisfaction by means of surveys in general population samples, ranked Japan 62nd out of 158 countries (Veenhoven, n.d.). Although these rankings focused on evaluating cognitive dimensions such as life satisfaction as a happiness index, it is unknown whether Japan might rank worse if measuring affective dimension such as happiness. To address this concern, the Japanese government has begun placing greater value on well-being as an assessment tool and conducting research on well-being at the Cabinet Office of Japan, which set up a Commission on Measuring Well-Being in 2010 (The Commission on Measuring Well-Being, Japan, 2011). Three main purposes of this commission were: (i) to make indicators from subjective and objective well-being and examine levels of happiness and factors affecting happiness, (ii) to utilize the SWB for policymaking, and (iii) to make evidence to discuss policy from the view of happiness of not only individuals but also community (Uchida & Ogihara, 2012).

Many factors have been examined as determinants of SWB including genes, personality, age, gender, income, and relationships (Centers for Disease Control and Prevention, 2016) and of these factors, age and gender play particularly important roles in determining levels of SWB. Gender differences significantly play critical roles on determining levels of happiness. For example, biological

factors such as hormones and different gender roles may have an impact on how males and females perceive happiness (Tesch-Römer, Moterl-Klingebiel, & Tomasik, 2008). Gender differences in happiness might also be influenced by social and cultural backgrounds in each country. Moreover, not only *levels* of happiness but also the *quality* of happiness may have associations with gender differences (Bonke, Deding, & Lausten, 2009; Giusta, Jewell, & Kambhampati, 2011). Some studies have discussed additional factors such as occupation and marital status associated with happiness were reflected by gender differences (Frey, 2010; Giusta et al., 2011; Lee & Ono, 2008; Sano & Ohtake, 2007).

In general, women tend to be happier than men in many societies including Japan (Blanchflower & Oswald, 2004; Ohtake et al., 2010; Tiefenbach & Kohlbacher, 2013a; Zweig, 2015) or there is no significant difference between women and men (Kahneman & Krueger, 2006; Zweig, 2015). Interestingly, women were happier and the gender gap in happiness was bigger in the East such as Japan than in other developed countries (Tiefenbach & Kohlbacher, 2013a; Zweig, 2015). These gender differences may be because of the cultural contexts in each country. For example, individuals in non-Western cultures respect relations as a group, and this cultural context is called collectivism. On the other hand, individuals in Western cultures value independence, freedom, and autonomy, and these cultural contexts are called individualism (Kitayama & Uchida, 2005; Markus & Kitayama, 1991; Schimmack et al., 2002). There is more happiness associated with personal achievement among Americans while Japanese people showed more associations between their levels of happiness and social harmony (Uchida & Kitayama, 2009). Additionally, women are more relational than men (Clancy & Dollinger, 1993; Josephs, Marukus & Tafarodi, 1992). A previous study found that men valued socioeconomic conditions such as housing conditions while women seemed to care more about relationships (e.g., the presence of children or participation in leisure-time activities) (Bonke et al., 2009). Another study also revealed that some of the differences related to life-satisfaction between women and men might be due to different weights of satisfaction with different life dimensions, such as paid work, health, social relations, or housing (Giusta et al., 2011).

Women are much happier than men in the East such as Japan because women who respect relatedness might be considered to be more culturally adaptable to live under collectivistic cultures. Many societies are commonly male-dominated even in this era. Although male societal privilege might bring a sense of well-being, some have argued that men may also feel a greater sense of social responsibility, resulting in greater unhappiness due to perceived stress levels (Ohtake et al., 2010). The reason why levels of happiness among women are not high in some countries might be as follows. Social gender inequality such as unequal access to individual resources and cultural attitudes toward gender equality is connected with levels of happiness. Women are often at a disadvantage or even excluded from societal resources and opportunities, which may lead to them experiencing negative psychological states such as unhappiness. Or, the cultural acceptance may affect levels of happiness (Tesch-Römer et al., 2008).

While many studies have argued gender differences in levels and quality of happiness (Blanchflower & Oswald, 2004), few studies have examined the various factors associated with happiness by gender (Giusta et al., 2011; Tiefenbach & Kohlbacher, 2013b). Thus, it is critical to continue to examine and clarify particular factors that influence levels of happiness by gender.

In addition to gender, age has been identified as a critical factor that also is related to happiness. The U-shaped distribution of happiness by age indicates that younger and older adults tend to show higher levels of SWB compared to middle-aged adults (Blanchflower & Oswald, 2008). Studies made of Japanese populations likewise confirmed that age was associated with happiness following the same U-shaped curve trend (after adjusting for cohort and period effects) (Shishido & Sasaki, 2011; Tiefenbach & Kohlbacher, 2013b). Because Japan is one of the so-called super-aged societies, its middle-aged population bears a heavy burden of care for the elderly, financially, physically, and psychologically. They play multiple social roles, such as a worker, spouse, and parent with caregiving of their parents (Kikuzawa, 2015). This particular social norm observed in Japan places tremendous pressure on individuals within the middle-aged population. It is critical, therefore, to investigate how aging and aged societies manage their policies and social services—including medical welfare—to maintain or improve citizens' well-being, especially for those in their middle age.

Previously, Japan-related studies on well-being and happiness have focused on a limited number of topics such as income inequality and social trust, but as an aged society, the Japanese government must identify more specific factors contributing to well-being, especially subjective well-being such as happiness. More importantly, it is important to investigate policymaking procedures in aging and aged societies to improve national levels of happiness. If factors such as age and gender have stronger associations with levels of happiness, it follows that the associated factors should be taken into consideration in the policymaking process, and a more detailed investigation of well-being and happiness-related factors is needed. In particular, Japan needs to examine how the significant gap between men's and women's happiness level has occurred in the society. Furthermore, age as a factor may play a critical role in one's happiness level because middle-aged groups in Japan may illustrate various contributing factors toward the happiness level depending on the different age groups. Therefore, the primary purpose of the present study is to examine contributing factors toward happiness among middle-aged men and women in Japan. We hypothesized that gender difference would have an impact on levels of happiness and women who value relatedness more than men do would play a significant role in happiness.

Materials and Methods

Study Population

The data collection was conducted in February 2011 in Tsukuba City, located 60 kilometers northeast of Tokyo, Japan. The survey used in this study was mandated by

the Long-Term Care Insurance Act to assess needs of individuals in every municipality aged 40–64 and 65 years or over, with the goal of promoting efficient care provision. These are the two age groups insured under Long-Term Care Insurance in Japan, with individuals aged 65 years or over being the primary category and those aged 40–64 being the secondary category. The self-administered questionnaire was mailed to 2,000 individuals aged between 40 and 64, living in Tsukuba City (response rate: 45.3 percent, n = 906). Participants were selected by stratified random sampling; we categorized the participants into seven geographic zones, according to the size of the population aged 40–64 from each zone. We obtained the completed data from Tsukuba City Office. After excluding incomplete samples (4.5 percent), the final sample size for the analysis was 865 (male = 344, female = 521).

The study using secondary data collected by the local aging service in Japan was approved by the Ethics Committee of the University of Tsukuba (approval No. 23-221. Accepted September 30, 2011). All of the collected data analyzed for this study indicated no content that discloses participants' privacy.

Measures

Demographic questions included age, gender, occupation, and living with a spouse. Instead of asking participant marital status, a question about whether participants were living with a spouse was included because many married couples in Japan commonly live in a different location due to the husband's work. Additionally, this study did not ask participants their race or ethnicity status because Japan is an ethnically homogeneous nation. Additional variables assessed in this study are discussed below.

Definition of Dependent Variable

The dependent variable for this study was a self-reported happiness level, which is the affective component of SWB. The happiness-scale we used was part of the local government survey in Japan, and the same scale has been included in the National Survey of Lifestyle Preference by the Japanese government (Cabinet Office, Government of Japan, 2012). Both the national and the local government initiatives have investigated well-being and reflected findings on their prioritization and policymaking. In response to the following question, "Currently, how happy are you?", participants evaluated their level of happiness on an 11-point Likert scale (0 = very unhappy and 10 = very happy). Since the distribution of happiness in the study participants was bimodal with a median of seven (see the Results section for details), the participants were divided into two groups: the higher level of well-being group (score of 8 or higher) and lower level of well-being group (7 or lower) (see Figure 1 for details).

Independent Variables

We used various factors as independent variables representing the three domains of well-being indicators from "The Commission on Measuring Well-being,
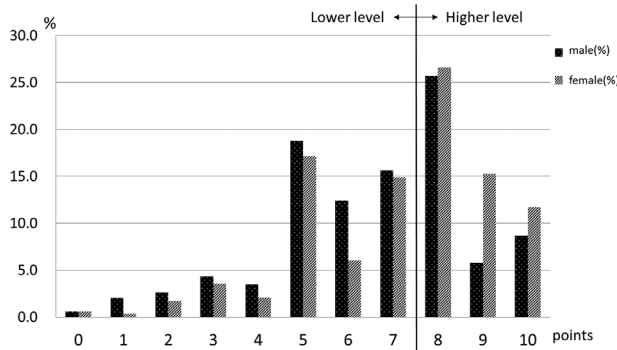
Figure 1. Distribution of Proportion of Each Level of Happiness by Gender.

Japan" (The Commission on Measuring Well-Being, Japan, 2011). The commission identified indicators of well-being for new promotion initiatives for a better society. Figure 2 presents the framework of these well-being indicators. The indicators consist of SWB as the most important indicator, based on three domains considered to be the most critical to well-being: (i) socioeconomic conditions, (ii) health, and (iii) relatedness (The Commission on Measuring Well-Being, Japan, 2011).

In this study, occupation was used to assess the socioeconomic conditions domain. Multiple lifestyle conditions and choices such as smoking status (e.g., "How often do you smoke?"), health history (e.g., "Do you have diseases under treatment or with aftereffects?"), lifestyle habits (e.g., "How do you maintain your health?"), sleep (e.g., "Do you sleep enough hours every day?"), diet (e.g., "Do you engage in healthy eating habits?"), fitness (e.g., "Do you exercise regularly?"), and regular medical checkups (e.g., "Do you seek out regular
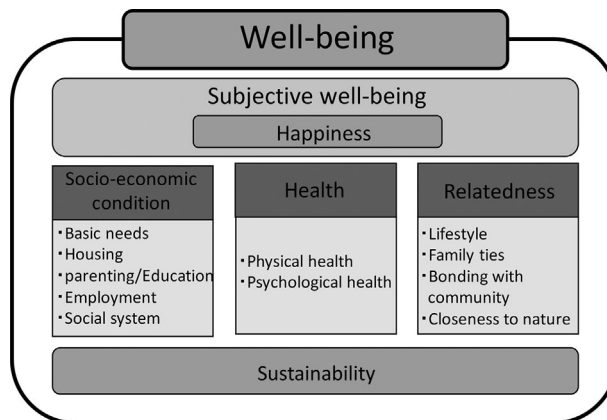

Figure 2. A Framework of Well-Being Indicators by the Commission on Measuring Well-Being, Japan (adapted by the author).

medical checkups?") were added to the health domain. Question items to assess living conditions such as living with a spouse and caring for their family member (e.g., "Do you care for your family or relatives?") were used to determine the relatedness domain.

Statistical Analysis

A chi-squared test was used to examine associations between happiness and the independent variables. Variables with a significance of less than 0.2 in the above bivariate analysis were considered (Fukuda & Ohashi, 1997). Then, logistic regression was carried out to select variables, using a stepwise approach, with an entry level of 0.20 and a stay level of 0.20 while checking for any multicollinearity. As a final model, eleven critical variables were selected that were either (i) shown by the multiple logistic regression models to be statistically significant for male or female participants, (ii) important variables clinically (smoking), or (iii) shown to be important by previous studies (age) (Blanchflower & Oswald, 2008; Shishido & Sasaki, 2011; Tiefenbach & Kohlbacher, 2013b). The median age was determined as 53 years old so that the participants were divided into two groups: younger age group (52 years or less) and older age group (53 years and more). Finally, multiple logistic regression models stratified by gender were fitted as well as calculating the adjusted odds ratios (OR) and 95% confidence intervals (95%CI). All statistical analyses were conducted using the software package SAS version 9.1 for Windows.

Results

Distribution of the Level of Happiness by Gender

Figure 1 shows the distribution of levels of happiness compared by gender. As it demonstrates, there were bimodal peaks; the largest portion of the population chose a score of eight followed by five, which is a common trend in Japan. The median score was seven in both male and female participants. The distribution of high levels of happiness was 139 out of 344 men (40.4 percent), and 278 out of 521 women (53.4 percent). More women, therefore, showed higher levels of happiness.

Description of the Sample and Bivariate Analysis

Table 1 presents descriptive statistics for the level of happiness by gender. We tested for associations between happiness and various factors by gender using a chi-squared test. In both male and female participants a significant association ($p < .05$) was observed between high levels of happiness and the following factors: living with a spouse, getting enough sleep, having a good diet, and leading a normal life. The following factors were significant only in men: having a job, not smoking, not having two or more diseases, and having

Table 1. Basic Characteristics of Relationships of Happiness and Variables by Gender

		Male (n = 344)			Female (n = 521)		
		The Level of Happiness			The Level of Happiness		
		Low	High		Low	High	
		n = 205 (59.6%)	n = 139 (40.4%)	p-value	n = 243 (46.6%)	n = 278 (53.4%)	p-value
Age	40–52	100 (61.3)	63 (38.7)	0.529	116 (77.3)	150 (56.4)	0.157
	53–64	105 (58.0)	76 (42.0)		127 (49.8)	128 (50.2)	
Living with a	Yes	149 (54.4)	125 (45.6)	<0.001*	185 (44.4)	232 (55.6)	0.027*
spouse	No	34 (87.2)	5 (12.8)		40 (58.8)	28 (41.2)	
Having a job	Yes	175 (57.6)	129 (42.4)	0.026*	154 (44.9)	189 (55.1)	0.327
	No	29 (76.3)	9 (23.7)		87 (49.4)	89 (50.6)	
Caring for a	Yes	25 (59.5)	17 (40.5)	0.953	36 (60.0)	24 (40.0)	0.023*
family member	No	180 (60.0)	120 (40.0)		202 (44.4)	253 (55.6)	
Smoking	Yes	76 (71.0)	31 (29.0)	0.004*	26 (54.2)	22 (45.8)	0.266
	No	129 (54.4)	108 (45.6)		216 (45.8)	256 (54.2)	
Having 2 or	Yes	43 (74.1)	15 (25.9)	0.013*	204 (46.5)	235 (53.5)	0.856
more diseases	No	162 (56.6)	124 (43.4)		39 (47.6)	43 (52.4)	
Getting enough	Yes	68 (48.6)	72 (51.4)	<0.001*	101 (40.9)	146 (59.1)	0.013*
sleep	No	137 (67.2)	67 (32.8)		142 (51.8)	132 (48.2)	
Having a good	Yes	72 (49.0)	75 (51.0)	<0.001*	133 (41.0)	191 (59.0)	0.001*
diet	No	133 (67.5)	64 (32.5)		110 (55.8)	87 (44.2)	
Leading a	Yes	55 (44.0)	70 (56.0)	<0.001*	94 (39.3)	145 (60.7)	<0.001*
normal life	No	150 (68.5)	69 (31.5)		149 (52.8)	133 (47.2)	
Regular	Yes	66 (53.7)	57 (46.3)	0.094	90 (40.4)	133 (59.6)	0.001*
exercise	No	139 (62.9)	82 (37.1)		153 (51.3)	145 (48.7)	
Having regular	Yes	90 (52.3)	82 (47.7)	0.006*	123 (43.5)	160 (56.5)	0.113
health checkups	No	115 (66.9)	57 (33.1)		120 (50.4)	118 (49.6)	

Note: The χ^2-test. *$p < 0.05$.

regular health checkups. The only significant factors for women were: not caring for a family member and regular exercise.

Final Logistic Regression Models

Table 2 shows the factors associated with high levels of happiness, stratified by gender, calculated by the multiple logistic regression analysis. In men, happiness was significantly associated with the following factors: living with spouse (OR = 6.59; 95%CI = 2.27–19.1), having a job (OR = 3.20, 95% CI = 1.19–8.61), getting enough sleep (OR = 1.81; 95%CI = 1.05–3.14), leading a normal life (OR = 2.41; 95%CI = 1.37–4.25), having regular health checkups (OR = 1.74; 95%CI = 1.02–2.97), smoking (OR = .50; 95%CI = 0.27–.90), and having two or more diseases (OR = .29; 95%CI = .13–.64). On the other hand, in women, there was a significant relationship only in caring for family member (OR = 0.51; 95%CI = 0.28–0.94).

Table 2. Factors Related to the High Level of Happiness Stratified by Gender

Variables	Male		Female	
	OR	(95%CI)	OR	(95%CI)
Age (53–64)	1.26	(0.72–2.21)	0.82	(0.56–1.22)
Living with a spouse	6.59	(2.27–19.1)*	1.67	(0.96–2.89)
Having a job	3.20	(1.19–8.61)*	1.31	(0.87–1.98)
Caring for a family member	1.47	(0.65–3.35)	0.51	(0.28–0.94)*
Smoking	0.50	(0.27–0.90)*	0.66	(0.34–1.30)
Having 2 or more diseases	0.29	(0.13–0.64)*	1.25	(0.73–2.15)
Getting enough sleep	1.81	(1.05–3.14)*	1.27	(0.85–1.88)
Leading a normal life	2.41	(1.37–4.25)*	1.42	(0.94–2.15)
Having regular checkups	1.74	(1.02–2.97)*	1.07	(0.73–1.57)
Having a good diet	1.62	(0.93–2.82)	1.26	(0.83–1.91)
Regular exercise	0.92	(0.53–1.59)	1.41	(0.95–2.10)

Note: Multiple logistic regression analysis, $^*p < 0.05$. OR: odds ratio, 95%CI: 95% Confidence Interval.

Discussion

In our study, we explored multiple factors relevant to happiness by gender in a middle-aged Japanese population. We chose to focus on the middle aged and assessed gender differences so that we could evaluate how the different stages of life and gender roles across the different age groups influence factors relevant to happiness. In male participants, occupation, health factors, and living with a spouse were statistically associated with happiness. In female participants, on the other hand, only caring for a family member was significantly related to low levels of happiness. Japanese people known as collectivists value relatedness, and Japanese women tend to care much more about giving priority to a relationship with others compared to Japanese men. In this current study, care for family, which we used as the relatedness domain, was very strongly associated with happiness for women. However, men's priorities over their levels of happiness were not only living with a spouse used as the related domain but also occupation and health factors.

Among male participants, as predicted, our study found having a job was associated with higher levels of happiness among male participants. Previous studies indicated unemployment reduced levels of happiness (after adjusting for income and/or other individual attributions) (Blanchflower & Oswald, 2004; Ohtake et al., 2010), and some studies also indicated that unemployment was a stronger psychological burden on men compared to women (Frey, 2010; Sano & Ohtake, 2007). In the Japanese traditional family dynamic, a father figure is viewed as the family breadwinner. Most middle-aged Japanese men feel a sense of responsibility to look after their family members so that unemployment may damage Japanese men's mental health (The Commission on Measuring Well-Being, Japan, 2011).

Among male participants, getting enough sleep, leading a normal life, and having regular health checkups were significantly associated with high levels of

happiness. On the other hand, smoking and having two or more diseases were significantly correlated with low levels of happiness. These findings were consistent with previous studies demonstrating how health and happiness had a positive correlation (Miret et al., 2014; Veenhoven, 2008). Furthermore, some studies found that higher levels of happiness had positive outcome effects on male health status (Kageyama, 2012; Möller-Leimkühler, 2003; Steptoe & Wardle, 2005). For example, greater happiness was a protective factor for ambulatory heart rate among men (Steptoe & Wardle, 2005). Another study found that the national average of the happiness level was inversely correlated to gender difference regarding life expectancy (Kageyama, 2012). This finding suggested that happiness might have a greater impact on men rather than women because of the correlation between happiness and longevity (Lawrence, Rogers, & Wadsworth, 2015).

Our results indicated that not only disease status but also smoking behavior and regular lifestyle influenced levels of happiness among male participants. Obviously, psychological stress gives a negative effect on our lives, and the negative psychological impact may be more concerning in men (Möller-Leimkühler, 2003). In fact, men's vulnerability to psychological stress tends to be linked to unhealthy coping skills or risk-taking behavior such as alcohol abuse or heavy smoking (Möller-Leimkühler, 2003; Ohtake et al., 2010). Therefore, in order to encourage healthier lifestyle behaviors, we need to promote health services that advocate disease prevention such as the provision of affordable regular health check-ups and support services for stress management.

Our results showed that living with a spouse had a positive association with levels of happiness among male participants. Some previous studies found that married couples were happier than unmarried individuals (Diener & Seligman, 2004; Giusta et al., 2011; Ohtake et al., 2010). One study suggested that marriage or cohabiting with a partner makes men happier, but this is not the case for women (Giusta et al., 2011). These findings may represent typical perceptions toward relationships in Japanese culture; previous studies found that men and women were equally happy in marriage in the United States, but Japanese women seemed to be less happy in marriage compared to Japanese men (Lee & Ono, 2008). Another Japanese study discovered single men were not as happy as married Japanese men (Oshio, 2012).

Our study revealed that the only factor negatively affecting levels of happiness was caregiving for a family member among female participants. Previous studies targeting family caregivers also showed fascinating associations between caregiving and happiness levels (Giusta et al., 2011; Uemura, Sekido, & Tanioka, 2014). When female caregivers spent extended hours on caregiving activities, their levels of life satisfaction were correspondingly lower. This result was possibly because the amount of time spent in caregiving took away their time to do their personal or social activities from the female caregivers (Giusta et al., 2011). On the other hand, the other study discovered male caregivers for their family members did not perceive caring for a family member as a burden. Explanation of these differences on the perception of the caring for a family member between men and women may be because Japanese men have better

ways to perceive a subjective sense of well-being and alleviate the burdens of caregiving demands outside of their caregiving time (Uemura et al., 2014).

Traditionally, there has been a cultural belief that Japanese women are supposed to stay home and care for family members. This belief applies to the caregiving situation in Japan. Although the number of male caregivers has increased, the vast majority are still women. Furthermore, many family caregivers feel the burden of caregiving and consequently experience physical and mental health problems (Arai & Washio, 1999; Schulz, Visintainer, & Williamson, 1990; Zarit, Todd, & Zarit, 1986), and Japanese women tend to feel the burdens more heavily (Schofield et al., 1999; Torimoto-sasai, Igarashi, Wada, Ogata, & Yama-moto-Mitani, 2015). In some cases, caregiving affects mortality (Reilly, Rosato, Ferry, Moriarty, & Leavy, 2017; Schulz & Beach, 1999). The perceptions of the burdens from caregiving may be related to the number of identities that caregivers acknowledge. In fact, a Japanese study showed that the employed status was enhancing the SWB of caregivers among both men and women, however male caregivers with three or more multiple roles (e.g., husband, father, and worker) felt satisfied as a person while female caregivers in the study showed no associations with satisfaction. Even if both men and women had additional identities in addition to be a caregiver, men were more likely to feel more optimistic about and satisfied with their life than women (Kikuzawa, 2015).

In 2000, the Japanese government initiated a mandatory public Long-Term Care Insurance (LTCI) system. While the LTCI system promoted the socialization of care under the slogan "from care by family to care by society," its services were targeted primarily at care recipients. Previous studies examining the effect of the LTCI service utilization on caregivers' burdens have reported mixed results illustrating there is still not enough support available to caregivers (Arai & Kumamoto, 2004; Kumamoto, Arai & Zarit, 2006; Tamiya et al., 2011; Umegaki et al., 2014). Unlike Western countries, Japanese legislation to support family caregivers has not improved (at the time of this study), except its introduction of care leave. As it is in other developed countries, home-based care is being promoted in Japan to meet the growing needs for long-term care and limited financial resources. Therefore, it is imperative to provide adequate support for family caregivers to foster a sense of self-worth and life satisfaction.

Many men and women (especially women) quit work to take up the family caregiving situation in Japan every year because they cannot afford to hire a licensed caregiver to care for their family member, while working might enhance the SWB of caregivers (Kikuzawa, 2015). Therefore, family caregivers need additional support to balance their responsibilities between caregiving and occupation. Additionally, the well-being of caregivers is thought to be affected by not only caregiving itself but also identity conflicts between caregiver and other roles (Miller, 1981). The levels of the burden caused by caregiving responsibilities would decrease if caregivers could concentrate on only caring for their family. Moreover, family caregivers often take care of their children and additional household duties in addition to the caregiving responsibilities. Therefore, it

has been challenging for Japanese society to promote more gender equity in caregiving and other housework duties.

Limitations and Bias

There were some limitations to this study. First, the cross-sectional nature of this study limited the findings to somewhat ambiguous causal correlations. For example, we could not determine for certain whether smoking brought unhappiness or unhappiness brought smoking. Previous studies suggested that happiness and health should have reciprocal effects (Miret et al., 2014; Veenhoven, 2008). Second, our evaluation tool for measuring happiness relied solely on the self-reported responses. It is perhaps necessary to be mindful of assessment strategies of happiness because two different people could report two different levels of happiness even though they may be in similar life situations. While we used the same measurement as the Japanese government implemented in the National Survey of Lifestyle Preference (Cabinet Office, Government of Japan, 2012), other studies have employed various instruments to measure well-being. Measurement tools used in those previous studies may have been more effective to answer the current research questions. Finally, the demographic questions used in our survey did not include some standard variables such as income, education levels, and marital status—factors that typically show strong correlations to levels of happiness.

Societal aging in Japan has brought unique societal challenges so that it is important to consider the various factors associated with well-being beyond the traditional measures of socioeconomic conditions, health status, and relatedness. The results from the current study highlighted the need to pay more attention to age groups and gender differences in order to provide efficient policies and health-care services to increase the nation's happiness level. As GNH rankings are based on factors associated with well-being, we must use SWB (such as self-reported levels of happiness) as an evaluation index for future studies and policymaking.

Conclusions and Policymaking Implications

Many countries including Japan have begun using happiness as an indicator of national growth and progress, in acknowledgment of the fact that economic growth does not necessarily reflect an individual's happiness. The current study indicated that the factors relevant to happiness varied according to gender, especially, relatedness domain (caregiving for family) was significantly associated with happiness for women. On the other hand, men showed various situations (one's occupation or health) associated with their levels of happiness. Our study found the happiness-related factors critically influenced by gender roles and what kind of policies could enhance levels of happiness among men and women in Japan. When policymakers consider ways to improve a nation's levels of happiness, it is important to evaluate various happiness-associated factors and to take into consideration the different stages of life and gender differences.

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