

What do we need to be happy? evidence from a psychosocial perspective

Su Yeon Kye^{*}, Kyoung hee Oh^{*}, Kee ho Park^{***}

^{*} Cancer Information and Education Branch, National Cancer Control Institute, National Cancer Center, Goyang, Republic of Korea

^{**} Cancer Policy Branch, National Cancer Control Institute, National Cancer Center, Goyang, Republic of Korea

<Abstract>

Objectives: This study aims to identify the psychosocial factors affecting on happiness among the general population in South Korea. **Methods:** This cross-sectional study was conducted using the multiple-stratified random sampling on the Korea Census of 2005. In October 2009, investigators conducted 15-minute face-to-face interviews with 1,500 South Korean volunteers ranging from 30 to 69 years old with no history of cancer. The questionnaire included socio-demographics, stress levels, coping strategies, social support, SOC, and happiness levels. **Results:** The multivariate analysis identified that married persons were more likely to be happy than those who were not married, respondents who had a higher score of stress and SOC were less likely to be happy, and those who had a higher score of social support from family were more likely to be happy. **Conclusions:** Interventions designed to increase happiness may need to include activities to control stress and promote social support from family.

Key words: Happiness, Korea, Psychosocial, Stress, Social support, Sense of coherence

I. Introduction

Since people satisfy more of their essential material needs throughout the world, the interest in happiness is gradually increasing. Happiness can be examined by two separate dimensions in terms of people's evaluations of their lives: life satisfaction which is appraised cognitively about one's life and emotions which refers to positive and negative affect (Diener, 2000). A whole view of the overall perception of happiness was created by the blend of these two components (Pavot & Dinner, 1993). Because happiness holds the diversity of meanings, it can be operationalized and assessed as general happiness (Michalos, Zumbo, & Hubley, 2000). To encompass the multitude of meanings for the individuals answering the question, the concept of happiness is measured by a

single-item using this comprehensive definition. Research has found that mortality may be predicted by single-item self-reported happiness questions better than by objective measures, even after counterbalanced by the negative impact of chronic illness on mortality (Guyen & Saloumidis, 2009).

There is a large amount of accumulating evidence that happiness is associated with many valued social resources, such as higher incomes, higher education, better mental health, improved social and personal functioning, lower unsocial activity, better job performance, healthy behaviors, and longevity (Diener 2000; Savelkoul et al., 2000; Subramanian, Kim, & Kawachi, 2005; Staats, Cosmar, & Kaffenberger, 2007; Grant, Wardle, & Steptoe, 2009; Lane et al., 2009; Piqueras et al., 2011; Shahab & West, 2012; Wang et al., 2012). On the basis of the individual and environmental

Corresponding author : Kee ho Park, MD, PhD

Cancer Policy Branch, National Cancer Control Institute, National Cancer Center, 323 Ilsan-ro Ilsandong-gu Goyang, 410-769 Republic of Korea

주소: (410-769) 경기도 고양시 일산동구 일산로 323 국립암센터 암정책과

Tel: +82-31-920-2160 Fax: +82-31-920-8133 E-mail: park.keeho@gmail.com

* This study was financially supported by National Cancer Center [Grant 1310260-2]. No potential conflicts of interest were disclosed.

• Received: January 19, 2015

• Revised: March 13, 2015

• Accepted: March 16, 2015

benefits of increasing happiness from these literature, the development of interventions aimed to improve and sustain individuals' happiness levels has attracted attention of positive psychologists (Seligman et al., 2005). However, the research on the most effective method of maximizing the level of happiness still needs to be conducted in depth.

Research has generally taken a stress-and-strain approach to the development of happiness, 'fixing what is wrong,' rather than 'developing what is right' (Schaufeli, 2004). However, previous studies revealed that happiness can be improved by emphasizing the positive psychosocial factors such as social support and efficient coping styles as well as reducing negative factors such as stress (Savelkoul et al., 2000; Azizi, 2012). Several happiness interventions using affirmative reactions such as counting one's blessings, performing acts of kindness, or promoting hopeful goal-directed thinking have shown positive findings to be emerged (Otake et al., 2006; Feldman & Dreher, 2012). An intervention program should not be initiated without first conducting a needs assessment to determine the specific needs of the target population. During this phase, it is extremely important to collect primary data from members of the target population (Gibert, Sawyer, & McNeill, 2011). Thus, it is necessary to collect and manipulate a particular set of positive psychosocial factors known to be related to happiness.

Some studies examined psychosocial variables related to happiness and showed that college students who reported perceived higher levels of stress were less happy than those who had lower levels of stress (Holly & Schiffrin, 2010). The stress levels of participants with higher emotional intelligence were lower and the levels of life satisfaction and happiness of them were higher, indicating that perceived stress mediates the relationship between emotional intelligence and a sense of well-being (Ruiz-Aranda, Extremera, & Pineda-Galan, 2013). Those who reported feeling stressed in normal circumstances and during tests situations showed a lower likelihood of being considered 'very happy' (Piqueras et al., 2011). Higher levels of emotion-based coping were linked to greater subjective happiness in cases of girls from the Government Aided School

(Joseashwinanand & Saraladevi, 2013). Conversely, in general there was a negative relationship between inefficient coping styles such as emotion-based coping and happiness and a positive relationship between efficient coping styles such as problem-based coping and happiness (Azizi, 2012). One study revealed that the best predictors of happiness in the immigrant women in Spain were emotional support from the family and instrumental support from the native (Dominguez-Fuentes & Hombrados-Mendieta, 2012). Findings demonstrate the importance of understanding the psychosocial factors affecting happiness. However, most of these studies have focused on a few psychosocial factors and a specific target. Therefore, the aim of the present study was to determine the relationship between happiness and other factors such as socio-demographics, stress, coping strategies, social support, and sense of coherence (SOC) among the general population in Republic of Korea.

II . Methods

1. Design and Sample

The participants in this cross-sectional study were chosen from a population-based database using multiple stratified random sampling on the Korea Census of 2005 which is the 17th population census in Korea. Administrative districts and their size were considered to select the enumeration districts. Three to eight households were chosen randomly in an enumeration district and one eligible person whose date of birth was closest to the point of survey was selected as a respondent per household. A total of 1,500 participants aged between 30 and 69 years, with no history of cancer, were engaged in face-to-face interviews in October 2009. Information was collected about the participants' happiness levels, stress levels, coping strategies, social support, SOC, and socio-demographics.

2. Measures

Happiness was assessed using people's responses to the question, 'In general, how would you describe your happiness?' As a construct, 'happiness' could be examined in terms of people's overall evaluation of their own lives and capture momentary feelings of pleasure. This single item is part of the General Health Questionnaire, which has been validated by many studies (Goldberg et al., 1997). Single-item happiness measures have been widely used in the literature in several different cultures (Subramanian et al., 2005; Wang et al., 2012). We dichotomized the four categories of the happiness measure to '0' if 'not happy at all,' and '1' if 'very happy,' 'mostly happy,' or 'a little bit happy' to identify the factors related "not to be unhappy" instead to "feel above the average happiness."

The Psychosocial Wellbeing Index—Short Form (PWI-SF) was used to assess participants' levels of psychosocial stress (Jang, 2000). The original PWI, based on the General Health Questionnaire-60 (Goldberg & Hillier, 1979), was revised and adapted by Jang (Jang, 1994) to amend for Korean population. It contains items on social performance and self-confidence (e.g. I can enjoy daily life), depression (e.g. I feel unhappy and depressed), general well-being and vitality (e.g. I feel comfortable and healthy), and sleeping disturbance and anxiety (e.g. I can't sleep well because I am concerned). The PWI-SF consists of 18 items, each scored on a four-point Likert scale ranging from 'strongly disagree' (0) to 'strongly agree' (3). The total score can range from 0 to 54. The Cronbach's alpha coefficient was 0.87.

Respondents' coping strategies were assessed using the Coping Strategy Indicator (CSI) developed by Amirkhan (Amirkhan, 1990). The CSI is a self-report measure containing 33 items that assess three coping strategies: social support seeking, problem solving, and avoidance. The participants are asked to recall one stressful situation that they encountered in the last six months and to rate each item based on the coping strategy they utilized. Each coping strategy is rated on a three-point Likert scale ranging from 'never' (1) to 'much' (3), and the score on the CSI can range from 11 to 33. The

Cronbach's alpha coefficients were 0.84, 0.86, and 0.76 for social support seeking, problem solving, and avoidance, respectively.

Social support was assessed using the Multidimensional Scale of Perceived Social Support (MSPSS) developed by Zimet & Farley (1988). The MSPSS consists of 12 perceived social support items and 3 subscales that assess support from 'family,' 'friends,' and 'significant others.' Participants were asked to rate each item on a five-point Likert scale ranging from 'strongly disagree' (1) to 'strongly agree' (5), and the score could range from 4 to 20. The Cronbach's alpha coefficients were 0.92, 0.90, 0.87 for family, friends, and significant others, respectively.

SOC was assessed using the Sense of Coherence Scale (SOC-13) developed by Antonovsky (1993). This scale refers to an enduring attitude and measures how people view life and, in stressful situations, identify and use their general resistance resources to maintain and develop their health. The SOC-13 consists of three dimensions with 13 items: comprehensibility, manageability, and meaningfulness. This tool uses a seven-point Likert scale ranging from "never" (1) to 'very often' (7). The total score on the tool can range from 13 to 91. The Cronbach's alpha coefficient for this scale was 0.77.

3. Ethics statement

The study protocol was approved by the Institute Review Board at the National Cancer Center, and informed written consent was obtained from all study participants.

4. Analysis

For the purpose of analysis, the chi-square test was conducted to assess the relationships between demographics, stress, coping strategy, social support, SOC, and happiness level. Multivariate analysis was performed using a stepwise multiple logistic regression model in order to determine adjusted odds ratios (aOR) for socio-demographic and psychosocial factors related to happiness, after adjusting effects of some possible confounding or background variables. Variables in the multivariate analysis

were selected based on variables that were marginally significant with $p < .1$ in univariate analysis. Probabilities for removal and entry of factors were set to 0.15 and 0.20. Correlation was performed to assess the confounders. Data were analyzed using SPSS 15.0 software.

III. Results

Table 1 and 2 list the characteristics of the sample and their happiness level with regard to each variable. The mean age

was 46.7 years (range, 30 to 69 years; median, 46.0 years), standard deviation (SD) was 10.3 years, 87% had a partner, and 74.3% were employed. Nearly one third of the participants had university-level education, whereas 19.8% of the study population had not completed high school. About 6% of the participants perceived that they were not happy at all. Happiness level differed significantly with regard to education, marital status, annual family income, stress, social support-seeking coping strategy, problem-solving coping strategy, social support from family, social support from friends, social support from significant others, and SOC.

<Table 1> Sociodemographic characteristics by happiness levels

| | Total <i>n</i> (%) | Happy <i>n</i> (%) | Unhappy <i>n</i> (%) | <i>p</i> [†] |
|--|-----------------------|-----------------------|-------------------------|-----------------------|
| Total | 1500(100.0) | 1410(94.0) | 90(6.0) | |
| Gender | | | | |
| Male | 755(50.3) | 705(50.0) | 50(55.6) | .329 |
| Female | 745(49.7) | 705(50.0) | 40(44.4) | |
| Age, years | | | | |
| 30-39 | 465(31.0) | 441(31.3) | 24(26.7) | .783 |
| 40-49 | 477(31.8) | 446(31.6) | 31(34.4) | |
| 50-59 | 339(22.6) | 319(22.6) | 20(22.2) | |
| 60-69 | 219(14.6) | 204(14.5) | 15(16.7) | |
| Education (missing <i>n</i> = 7) | | | | |
| None | 16(1.1) | 14(1.0) | 2(2.2) | .036 |
| Elementary school graduate | 115(7.7) | 101(7.2) | 14(15.7) | |
| Middle school graduate | 164(11.0) | 152(10.8) | 12(13.5) | |
| High school graduate | 731(49.0) | 695(49.5) | 36(40.4) | |
| College graduate | 430(28.8) | 408(29.1) | 22(24.7) | |
| ≥ Graduate school | 37(2.5) | 34(2.4) | 3(3.4) | |
| Marital status | | | | |
| Not married | 139(9.3) | 121(8.6) | 18(20.2) | <.001 |
| Married | 1306(87.0) | 1243(88.0) | 63(70.8) | |
| Divorced/Separated | 16(1.1) | 14(1.0) | 2(2.2) | |
| Widowed | 40(2.7) | 34(2.4) | 6(6.7) | |
| Annual family income, US dollars (missing <i>n</i> = 19) | | | | |
| < 20,000 | 299(20.2) | 269(19.3) | 30(33.7) | .001 |

| | Total <i>n</i> (%) | Happy <i>n</i> (%) | Unhappy <i>n</i> (%) | <i>p</i> [†] |
|--|-----------------------|-----------------------|-------------------------|-----------------------|
| 20,000-29,999 | 394(26.6) | 365(26.2) | 29(32.6) | |
| 30,000-39,999 | 446(30.1) | 424(30.5) | 22(24.7) | |
| 40,000-49,999 | 199(13.4) | 192(13.8) | 7(7.9) | |
| 50,000-69,999 | 106(7.2) | 106(7.6) | 0(0.0) | |
| ≥ 70,000 | 37(2.5) | 36(2.6) | 1(1.1) | |
| Type of job | | | | |
| None | 56(3.7) | 50(3.5) | 6(6.7) | .502 |
| Outdoor (agriculture, animal, forest & fishing) | 42(2.8) | 39(2.8) | 3(3.3) | |
| Self-employed, small business (retail, food service, taxi driving, etc.) | 446(29.7) | 417(29.6) | 29(32.2) | |
| Sales & marketing (customer service) | 190(12.7) | 176(12.5) | 14(15.6) | |
| Engineering, technical, transport & logistics | 86(5.7) | 80(5.7) | 6(6.7) | |
| Building, construction, & manual (including cleaning, security, etc.) | 56(3.7) | 51(3.6) | 5(5.6) | |
| Office & administrative (general office work, education & training) | 263(17.5) | 251(17.8) | 12(13.3) | |
| Management & executive | 8(0.5) | 7(0.5) | 1(1.1) | |
| Professional (academic, health care, law, arts, etc.,) | 24(1.6) | 23(1.6) | 1(1.1) | |
| Housewife | 330(22.0) | 317(22.5) | 13(14.4) | |
| Religious affiliation | | | | |
| None | 631(42.6) | 586(42.1) | 45(50.6) | .260 |
| Buddhist | 373(25.2) | 351(25.2) | 22(24.7) | |
| Protestant | 371(25.0) | 356(25.6) | 15(16.9) | |
| Catholic | 107(7.2) | 100(7.2) | 7(7.9) | |

[†] *p* values were determined using the chi-square test and *t*-test.

<Table 2> Psychosocial factors by happiness levels

| | Total mean(SD) | Happy mean(SD) | Unhappy mean(SD) | <i>p</i> [†] |
|---|-------------------|-------------------|---------------------|-----------------------|
| Stress | 36.80(7.85) | 36.10(7.31) | 47.93(7.70) | <.001 |
| Coping strategy: Social support seeking | 21.86(3.93) | 21.93(3.86) | 20.65(4.72) | .003 |
| Coping strategy: Problem solving | 23.73(4.11) | 23.83(4.08) | 22.20(4.40) | <.001 |
| Coping strategy: Avoidance | 18.26(3.82) | 18.22(3.81) | 18.76(3.99) | .195 |
| Social support: Family | 15.34(2.55) | 15.46(2.42) | 13.48(3.59) | <.001 |
| Social support: Friends | 14.32(2.70) | 14.41(2.63) | 12.90(3.23) | <.001 |
| Social support: Significant others | 14.77(2.94) | 14.88(2.83) | 12.98(3.92) | <.001 |
| Sense of Coherence | 58.88(9.04) | 59.24(8.79) | 53.32(10.95) | <.001 |

[†] *p* values were determined using the chi-square test and *t*-test.

Stepwise multiple logistic regression was performed to explain relationships between socio-demographic and psychosocial factors, and happiness level, after adjusting for effects of some possible confounding or background variables. Education, marital status, annual family income, stress, social support-seeking coping strategy, problem-solving coping strategy, social support from family, social support from friends, social support from significant others, and SOC were retained in the multivariate logistic regression model ($p < .1$). The analyzed results of the stepwise logistic regression model are summarized in Table 3. The results revealed that married

persons were more likely to be happy than those who were not married (aOR 2.77, 95% CI, 1.43 to 5.38). Stress (aOR 0.79, 95% CI, 0.75 to 0.82) and SOC (aOR 0.96, 95% CI, 0.92 to 0.99) were the independent psychosocial risk factors for happiness, and social support from family (aOR 1.14, 95% CI, 1.04 to 1.25) was the independent psychosocial protective factor for happiness. Correlation was conducted to assess the confounding variables indicating that some of the independent factors (stress, coping strategy: social support seeking, coping strategy: problem solving, coping strategy: avoidance, social support, and sense of coherence) were significantly correlated.

<Table 3> Multivariate logistic regression analysis with happiness as the dependent variable.[†]

| | β | Wald χ^2 | p-value | OR | 95% CI |
|----------------------------------|---------|---------------|---------|------|-----------|
| Marital status(ref: Not married) | | | | | |
| Married | 1.022 | 9.15 | .002 | 2.77 | 1.43-5.38 |
| Divorced/Separated | 0.367 | 0.16 | .689 | 1.44 | 0.23-8.72 |
| Widowed | 0.281 | 0.20 | .649 | 1.32 | 0.39-4.45 |
| Stress | -0.233 | 100.40 | <.001 | 0.79 | 0.75-0.82 |
| Social support: Family | 0.136 | 8.74 | .003 | 1.14 | 1.04-1.25 |
| Sense of Coherence | -0.041 | 5.92 | .015 | 0.96 | 0.92-0.99 |
| $R^2 = 0.134$ | | | | | |

Abbreviations: OR, odds ratio; CI, confidence interval

[†] Variables with $p < .01$ in the univariate analysis, such as education, marital status, income, stress, coping strategy: social support seeking, coping strategy: problem solving, social support: family, social support: friends, social support: significant others, and sense of coherence, were retained in the stepwise multiple logistic regression analysis. Finally, four variables such as marital status, stress, social support by family, and sense of coherence entered in the multivariate logistic model.

IV. Discussion

Our findings reveal significant associations between socio-demographics and psychosocial factors and happiness level. Married people were more likely to be happy than those who were not married. Stress level and SOC were negatively associated with happiness. Higher social support from family was predictive of a higher level of happiness. Gender, age, education, income, type of job, religion, social support-seeking coping strategy, problem-solving coping strategy, avoidance coping strategy, social support from friends, and social support

from significant others were not related to happiness level.

Married people reported a higher level of happiness than people who are not married. This is consistent with previous studies (Subramanian et al., 2005; Oshio & Kobayashi, 2012; Yiengprugsawan et al., 2012). Subramanian et al. (2005) showed that married people reported higher levels of happiness and health than people who were single, widowed, or separated/divorced, and individuals who were unmarried or separated/divorced reported higher odds ratios for unhappiness than for poor health compared with married groups (Subramanian et al., 2005). This is supported by a previous

study that those who were separated, divorced, or widowed were the least happy (Yiengprugsawan et al., 2012).

While there was no association appeared in this study, previous research has shown an association between income level and happiness. Researchers have found consistent positive correlations between income level and happiness (Diener & Biswas-Diener, 2002; Subramanian et al., 2005; Oshio & Kobayashi, 2012; Yiengprugsawan et al., 2012). For example, on comparing the lowest income category to the highest, those in the lowest were about 3.85 times more likely to be unhappy (Subramanian et al., 2005). However, we were unable to find any relationship between income and happiness. Kahneman et al. (2006) offered an explanation for why income has no association with happiness. Incorporating the role of time may shed light on the issue. How people spend their time may explain happiness in some respects. Although income rises, individuals do not appear to shift their pattern of using time toward activities that utilize for improving affect. A nationwide survey showed that, as greater income people earned, they devoted more of their time to work, commuting, and compulsory non-work activities (such as childcare and shopping) and less of their time to unengaged leisure activities (such as watching TV) (Kahneman et al., 2006). The activities that higher income individuals spend their time in seem to be less likely to induce them to feel higher level of happiness, on average, but to more likely to arouse slightly higher tension and stress. In the Republic of Korea, the Average Annual Hours Actually Worked per Worker is the world's second highest following Mexico (Organization for Economic Cooperation and Development [OECD], 2013). Though work plays an important role in paying money and improving an individual's self-esteem and sense of accomplishment (Reis et al., 2000), the number of hours Koreans spend working may exceed the requirement for these benefits. Koreans' increasingly long workdays may attenuate the opportunities of connecting with others such as romantic partners, friends, and family. It is these relationships that are essential for personal happiness. Also, one more thing that we can consider as the reason is the worldwide financial crisis at the survey time.

Uncertainty and rapid economic change make people unstable and unhappy in general (Graham, Chattopadhyay, & Picon, 2010). Thus, due to the economic situation, there seemed no association between income and happiness among the Korean public.

Many previous studies reported that religion has been found to have a positive impact on individuals' happiness (Swinraed, Kau, & Phua, 2001; Ferriss, 2002; Addai, Opoku-Agyeman, & Amanfu, 2013), but our findings reveal no such association. Ferriss (2002) reported that happiness is associated with the frequency of attendance at religious services, with denominational and doctrinal preference. Swinyard et al. (2001) showed that happiness is positively related to 'intrinsic' religion instead of 'extrinsic' religion or religion as a 'quest.' Addai et al. (2013) revealed that all the variables related to religion—religious affiliations, religious involvement, and attendance to religious services—emerged as significant predictors of how Ghanaians appraised their own wellbeing. Generally, religion is assumed to influence happiness in various ways: by providing members with a sense of belonging and serving as a source of social support, by providing individuals' lives meaning and purpose, and by encouraging people to lead healthier lifestyles (Ellison, Gay, & Glass, 1989). In contrast, consistent with our study, Lewis (2002) found no association between a greater frequency of church attendance and happiness scores. One possible explanation for this result in our study is that we only asked whether participants had a religion, not the degree to which they participated in religious activity. We did not take into account that it is engagement in religious activities, which contributes to happiness and not just affiliation. This result also clearly reaffirms the view that the relationship between religion and happiness varies according to the precise measures used and the samples studied (Robbins & Francis, 1996). Apparently, how religion affects happiness is different according to the situations, and the balance of effects is not always positive. Hence, further research should not focus on whether religiousness has a positive association with happiness but on what kinds of conditions and people.

We found that respondents who perceived higher levels of stress reported being less happy than those with lower levels of stress. These results are in line with previous evidence showing that the increase of happiness and self-reported stress appear not to coincide (Holly & Schiffrin, 2010; Mikolajczak et al., 2010; Piqueras et al., 2011). Piqueras et al. (2011) reported that those who reported feeling stressed in normal daily life and during test situations showed a lower likelihood of being considered 'very happy.' Holly and Schiffrin (2010) also found that these two stress indicators were related to happiness in the opposite direction among college students. In addition to these results, Mikolajczak et al. (2010) found a negative relationship between subjective happiness and the cortisol awakening response flexibility, a biological marker of psychological and physical health status. This study suggests that interventions designed to increase happiness might have an effect from the inclusion of activities to manage and cope with stressful events.

As the level of perceived social support from family increased, respondents were more likely to perceive that they were happy. Individuals' wellbeing is beneficially mediated by social relationships through improving self-image, feelings of self-worth, personal control, and conforming to behavioral standards, all of which are essentials to health promotion (Cohen, Gottlieb, & Underwood, 2000). Several studies have examined the association between social support and happiness. One cross-sectional study revealed that coping by avoidance led to less social support, and this decrease in social support negatively influenced happiness (Savelkoul et al., 2000). Social support usually consists of both structural and functional aspects. Structural support refers to the existence of family or friends and other social networks within an individual's environment. North et al. (2008) reported that happiness increased concurrently with social support from family. Family support meets a fundamental need for sense of stability and belonging that is not fulfilled by economic security alone or by wealth. Reis and Gable (2003) argued that social relations play a significant role in identity formation and self-perception, emotion regulation, development of coping

strategy, uncertainty reduction, cooperative work, and the fulfillment of personal aspirations. If supportive relationships in family life are reinforced constantly, there may be a noticeable outgrowth of life satisfaction. Social support also refers to the functional content of relationships, which can be categorized into four types: emotional, instrumental, informational, and appraisal support (House, 1981). Dominguez-Fuentes (2012) reported that the most predictable valuables of happiness for immigrant women were emotional support from the family and instrumental support from the natives. However, few studies have investigated the relationship between specific types of support and happiness, and we did not identify a particular type of social support that was more influential. It is necessary to determine which sources provide certain types of support as this can guide efforts to promote happiness based on the receiver's educational needs.

Our findings failed to support the evidence that persons with a high sense of meaningfulness, manageability, and comprehensibility, which are three components of SOC, have more distinguishable potentials for health prospects than other people. We found no difference in happiness between individuals with a high SOC and those with a low SOC. Conversely, a low SOC predicted significantly higher happiness than a high SOC. It might be suspected that a methodological drawback was responsible for this unexpected result. While the SOC scale has proved to be psychometrically comparatively sound, the structure of the SOC concept has partly defects (Eriksson & Lindstrom, 2005). Erikson and Lindstrom (2005) revealed that the associations between the SOC scales and the theoretical construction principles differed depending on the studies. Moreover, SOC does not seem to be that stable in contrast with Antonovsky. Erikson and Lindstrom (2005) showed that the older people get, the higher score of SOC; SOC tends to increase with age through the lifetime. This unexpected finding highlights the necessity for further research to examine the relationship between SOC and happiness among the general population. On the other hand, as previously stated, the financial crisis may temporarily influence

the generalized resistance resources which is the main concept of SOC not to be controlled and adapted. Thus, people became not to be able to perceive their life meaningful, manageable, and comprehensible resulting that the SOC seemed not to have an impact on the happiness.

Some limitations should be noted in interpreting these results. Social desirability and common method bias cannot be eliminated because of self-report measures. In addition, use of a single item to measure happiness may not reflect entire construct like as assessed using a multi-item index. However, single-item measures have commonly been used in several research related to happiness (Lyubomirsky, King, & Diener, 2005), and recent evidence has indicated that single item measures show good convergent, concurrent, and divergent validity in community-setting surveys (Abdel-Khalek, 2006). It should also be noted that this is a cross-sectional study, and thus, the associations observed between variables could be temporary, not confirming a causal relationship. Future research should take into account the temporal variable and collect information at different times over the study period. Also, more various factors related to happiness need to be focused on in the future study to develop a more comprehensive model of the associations between happiness and psychosocial factors. For example, when assessing a person's happiness, personality has been known to have an effect on it, largely because it influences on the way an individual communicates and interacts with environmental stimuli (DeNeve & Cooper, 1998). Optimism is also a key variable related to psychological wellbeing (Seligman, 2002). Optimists may be better able to recognize stressful events positively and respond constructively than pessimists.

V. Conclusion

This study suggests that growing levels of perceived stress are related to decreases in happiness, and indicates the importance of analyzing social support. Therefore, interventions designed to increase happiness may require the

inclusion of various activities to manage and cope with stress and promote social support from family. Further, interventions including the psychosocial factors related to happiness can be developed to prove the effectiveness for improving healthy lifestyles. Future longitudinal research on broad factors that affect the relationship between happiness and psychosocial factors will guide health psychologists, communicators, and educators to develop individual-tailored interventions and supportive surroundings to maximize level of happiness and, consequently, healthy life.

References

- Abdel-Khalek, A. M. (2006). Measuring happiness with a single-item scale. *Social Behavior and Personality*, 34, 139-150.
- Addai, I., Opoku-Agyeman, C., & Amanfu, S. K. (2013). Exploring predictors of subjective well-being in Ghana: a micro-level study. *Journal of Happiness Studies*. Advance online publication.
- Amirkhan, J. H. (1990). A factor analytically derived measure of coping: the coping strategy indicator. *Journal of Personality and Social Psychology*, 59, 1066-1074.
- Antonovsky, A. (1993). The structure and properties of the sense of coherence scale. *Social Science & Medicine*, 36, 725-733.
- Azizi, M. (2012). Relationship between happiness and stress coping strategies among Zabol university students in academic year of 2010-11. *Advances in Natural and Applied Sciences*, 6, 163-166.
- Cohen, S., Gottlieb, B. H., & Underwood, L. G. (2000). Social associations and health. In Cohen, S., Underwood, L. G., Gottlieb, B. H. (Ed.), *Social support measurement and intervention: a guide for health and social scientists* (pp. 3-25). Oxford, UK: Oxford Univer Press.
- DeNeve, K. M., & Cooper, H. (1998). The happy personality: a meta-analysis of 137 personality traits and subjective well-being. *Psychological Bulletin*, 124, 197-229.
- Diener, E. (2000). Subjective well-being. The science of happiness and a proposal for a national index. *American Psychologists*, 55, 34-43.
- Diener, E., & Biswas-Diener, R. (2002). Will money increase subjective well-being? *Social Indicators Research*, 57, 119-169.
- Dominguez-Fuentes, J. M., & Hombrados-Mendieta, M. I. (2012). Social support and happiness in immigrant women in Spain. *Psychological Reports*, 110, 977-990.
- Ellison, C. G., Gay, D. A., & Glass, T. A. (1989). Does religious commitment contribute to individual life satisfaction? *Social Forces*, 68, 100-123.

- Eriksson, M., & Lindstrom, B. (2005). Validity of Antonovsky's sense of coherence scale: a systematic review. *Journal of Epidemiology & Community Health, 59*, 460-466.
- Feldman, D. B., & Dreher, D. E. (2012). Can hope be changed in 90 minutes? Testing the efficacy of a single-session Goal-Pursuit Intervention for college students. *Journal of Happiness Studies, 13*, 745-759.
- Ferriss, A. (2002). Religion and the quality of life. *Journal of Happiness Studies, 3*, 199-215.
- Gibert, G. G., Sawyer, R. G., & McNeill, E. B. (2011). *Health education*. Ontario, Canada: Jones and Bartlett publishers.
- Goldberg, D. P., & Hillier, V. F. (1979). A scaled version of the General Health Questionnaire. *Psychological Medicine, 9*, 139-145.
- Goldberg, D. P., Gater R., Sartorius N., Ustun T. B., Piccinelli M., Gureye O. (1997). The validity of two versions of the GHQ in the WHO study of mental illness in general health care. *Psychological Medicine, 27*, 191-197.
- Graham, C., Chattopadhyay, S., & Picon, M. (2010). *Does the Dow Get You Down? Happiness and the U.S. Economic Crisis*. Washington, USA: The Brookings Institution.
- Grant, N., Wardle, J., & Steptoe, A. (2009). The relationship between life satisfaction and health behavior: a cross-cultural analysis of young adults. *International Journal of Behavioral Medicine, 16*, 259-268.
- Guyen, C., & Saloumidis, R. (2009). *Why is the world getting older? The influence of happiness on mortality* (SOEP paper No. 198).
- Holly, H., & Schiffrin, S. K. N. (2010). Stressed and Happy? Investigating the relationship between happiness and perceived stress. *Journal of Happiness Studies, 11*. 33-39.
- House, J. S. (1981). *Work stress and social support*. Reading, Mass.: Addison-Wesley.
- Jang, S. (1994). Standardization of stress measurement scale. *Journal of Wonju Medical College, 7*, 21-38.
- Jang, S. (2000). Stress. In Korean society for preventive medicine (Ed.), *Collecting Health-related Statistical Data and Assessment Standardization* (92-132). Seoul: Gyechuk Munwhasa Publishing.
- Joseashwinanand, A., & Saraladevi, K. (2013). Emotion based coping and subjective happiness among higher secondary students. *International Journal of Scientific Research, 2*, 395-399.
- Kahneman, D., Krueger, A. B., Schkade, D., & Schwarz, N. (2006). Would you be happier if you were richer? A focusing illusion. *Science, 312*, 1908-1910.
- Lane, R. D., Reis, H. T., Peterson, D. R., Zareba, W., & Moss, A. J. (2009). Happiness and stress alter susceptibility to cardiac events in Long QT Syndrome. *Annals of Noninvasive Electrocardiology, 14*, 193-200.
- Lewis, C. A. (2002). Church attendance and happiness among Northern Irish undergraduate students: No association. *Pastoral Psychology, 50*, 191-195.
- Lyubomirsky, S., King, L., & Diener, E. (2005). The benefits of frequent positive affect: does happiness lead to success? *Psychological Bulletin, 131*, 803-855.
- Michalos, A. C., Zumbo, B. D., & Hubble, A. (2000). Health and quality of life. *Social indicators Research, 51*, 245-286.
- Mikolajczak, M., Quoidbach, J., Vanootighe, V., Lambert, F., Lahaye, M. (2010). Cortisol awakening response (CAR)'s flexibility leads to larger and more consistent associations with psychological factors than CAR magnitude. *Psychoneuroendocrinology, 35*, 752-757.
- North, R. J., Holahan, C. J., Moos, R. H., & Cronkite, R. C. (2008). Family support, family income, and happiness: a 10-year perspective. *Journal of Family Psychology, 22*, 475-483.
- Organization for Economic Cooperation and Development. (2013). OECD.statextracts.
- Oshio, T., & Kobayashi, M. (2010). Income inequality, perceived happiness, and self-rated health: evidence from nationwide surveys in Japan. *Social Science & Medicine, 70*, 1358-1366.
- Otake, K., Shimai, S., Tanaka-Matsumi, J., & Otsui, K. (2006). Happy People Become Happier through Kindness: A Counting Kindnesses Intervention. *Journal of Happiness Studies, 7*, 361-375.
- Pavot, W., & Diener, E. (1993). Review of the satisfaction with life scale. *Psychological Assessment, 5*, 164-172.
- Piqueras, J. A., Kuhne, W., Vera-Villarreal, P., & van Straten, A. (2011). Happiness and health behaviours in Chilean college students: a cross-sectional survey. *BMC Public Health*. Advance online publication.
- Reis, H. T., & Gable, S. L. (2003). Toward a positive psychology of relationships. In Keyes, C. L. M. & Haidt, J. (Ed.), *Flourishing: Positive psychology and the life well-lived* (pp. 129-159). Washington, DC: American Psychological Association.
- Reis, H. T., Sheldon, K. M., Gable, S. L., Roscoe, J., & Ryan, R. M. (2000). Daily well-being: The role of autonomy, competence, and relatedness. *Personality and Social Psychology Bulletin, 26*, 419-435.
- Robbins, M., & Francis, L. J. (1996). Are religious people happier? A study among undergraduates. In Francis, L. J., Kay, W. K., Campbell, W. S. (Ed), *Research in Religious Education* (pp. 207-217). Leominster: Gracewing.
- Ruiz-Aranda, D., Extremera, N., & Pineda-Galan, C. (2013). Emotional intelligence, life satisfaction and subjective happiness in female student health professionals: the mediating effect of perceived stress. *Journal of Psychiatric and Mental Health Nursing*.
- Savelkoul, M., Post, M. W., de Witte, L. P., & van den Borne, H. B. (2000). Social support, coping and subjective well-being in

- patients with rheumatic diseases. *Patient Education and Counselling*, 39, 205-218.
- Schaufeli, W. B. (2004). The future of occupational health psychology. *Applied Psychology: An International Review*, 53, 502-517.
- Seligman, M. E., Steen, T. A., Park, N., & Peterson, C. (2005). Positive psychology progress: empirical validation of interventions. *American Psychologist*, 60, 410-421.
- Seligman, M. E. P. (2002). *Authentic happiness: Using the new positive psychology to realize your potential for lasting fulfillment*. New York, NY: Free Press.
- Shahab, L., & West, R. (2012). Differences in happiness between smokers, ex-smokers and never smokers: cross-sectional findings from a national household survey. *Drug and Alcohol Dependence*, 121, 38-44.
- Staats, S., Cosmar, D., & Kaffenberger, J. (2007). Sources of happiness and stress for college students: a replication and comparison over 20 years. *Psychological Reports*, 101, 685-696.
- Subramanian, S. V., Kim, D., & Kawachi, I. (2005). Covariation in the socioeconomic determinants of self rated health and happiness: a multivariate multilevel analysis of individuals and communities in the USA. *Journal of Epidemiology and Community Health*, 59, 664-669.
- Swinyard, W. R., Kau, A. K., & Phua, H. Y. (2001). Happiness, materialism, and religious experience in the US and Singapore. *Journal of Happiness Studies*, 2, 13-32.
- Wang, F., Orpana, H. M., Morrison, H., de Groh, M., Dai, S. (2012). Long-term association between leisure-time physical activity and changes in happiness: analysis of the Prospective National Population Health Survey. *American Journal of Epidemiology*, 176, 1095-1100.
- Yiengprugsawan, V., Somboonsook, B., Seubsman, S. A., & Sleigh, A. C. (2012). Happiness, Mental Health, and Socio-Demographic Associations Among a National Cohort of Thai Adults. *Journal of Happiness Studies*, 13, 1019-1029.
- Zimet, G. D., Zimet, S. G., & Farley, G. K. (1988). The multidimensional scale of perceived social support. *Journal of Personality Assessment*, 52, 30-41.