

# Consumption and Life Satisfaction: The Korean Evidence

Choung, Youngjoo and Pak, Tae-Young and Chatterjee, Swarn

Samsung Fire Marine Insurance, Sungkyunkwan University, University of Georgia

1 September 2021

Online at https://mpra.ub.uni-muenchen.de/115765/ MPRA Paper No. 115765, posted 25 Dec 2022 15:44 UTC

# Consumption and life satisfaction: The Korean evidence

Youngjoo Choung, Ph.D.<sup>1</sup> Tae-Young Pak, Ph.D.<sup>2\*</sup> Swarn Chatterjee, Ph.D.<sup>3</sup>

#### Abstract

This study examines the association between consumption expenditure and life satisfaction among older Koreans (aged 50 or older). We estimate a series of individual fixed effects regressions that link life satisfaction to various types of household consumption using data drawn from the Korean Longitudinal Study of Aging. The results show that leisure consumption is positively related to life satisfaction and that this association is driven largely by uncommon and infrequent leisure activities, like travel and entertainment. Expenditures for leisure that provides more ordinary experiences, such as recreation and self-development programs, were generally uncorrelated with life satisfaction, despite being consumed by a large fraction of older Koreans. Finally, the evidence on whether material purchases or status-enhancing purchases were positively correlated with life satisfaction is mixed. On the one hand, our findings reaffirm the conventional wisdom that people feel more satisfied when spending money on experiences than on material possessions. On the other hand, we provide the novel finding that consumption directed toward extraordinary and memorable experiences that go beyond everyday life tends to generate greater future life satisfaction.

**Keywords**: happiness, leisure consumption, life satisfaction, retrospective evaluation, subjective well-being.

<sup>&</sup>lt;sup>1</sup> Samsung Fire & Marine Insurance, Seoul, South Korea

<sup>&</sup>lt;sup>2</sup> Department of Consumer Science, Sungkyunkwan University, Seoul, South Korea

<sup>&</sup>lt;sup>3</sup> Department of Financial Planning, Housing and Consumer Economics, University of Georgia, Athens, GA, USA

<sup>\*</sup> *Correspondence* (E-mail: typak@skku.edu)

# **1. INTRODUCTION**

Researchers have extensively examined the relationship between income and subjective well-being. A series of cross-country and individual-level analyses have shown that income has only a modest influence on happiness and that income growth does not lead to a corresponding increase in happiness (Easterlin, 1995). In general, happiness increases with average income up to a certain point, but beyond that additional money comes with little extra pleasure. Once an individual escapes from poverty, the main source of happiness is not income, but a broader non-economic context (Lynbomirsky, Sheldon, & Schkade, 2005; Xiao & Li, 2011).

The basic premise of income-happiness research is that current income translates directly into resources for consumption (MacDonald & Douthitt, 1992). However, this assumption appears to be at odds with predictions from the consumer choice theory that utility-maximizing consumers do not spend all their income. Instead, individuals often borrow money or delay current consumption to smooth out their consumption path over time. Economists have long argued that income is, at best, a noisy proxy for consumption and material well-being and that happiness research needs to model consumption directly (MacDonald & Douthitt, 1992; Neulinger & Rado, 2018).

Evidence on the relationship between consumption and life satisfaction is relatively sparse. Seminal work by DeLeire and Kalil (2010) showed that older Americans derived more satisfaction from the goods and services that strengthen social cohesiveness, such as leisure and charitable activities. Money spent on necessities (food, healthcare, and housing) and material goods (durables and clothing) accounted for a large portion of monthly expenditures but had little influence on life satisfaction. Subsequent studies found that spending money to acquire experiences (experiential purchases) or signal social status (conspicuous consumption) was associated with increases in life satisfaction (Brown & Gathergood, 2017; Dumludag, 2015; Gokdemir, 2015; Noll & Weick, 2015; Wang, Cheng, & Smyth, 2019; Zimmermann, 2014).

One explanation for the greater satisfaction consumers derive from experiential purchases is that positive memories of the experience are amplified through anticipation (excitement about an upcoming experience) and retrospective evaluation (telling stories about the experience). The hedonic benefits of experience tend to extend across a broad period, from the anticipatory planning period to the post-purchase evaluation period, which involves sharing good memories with friends and family (Kumar & Gilovich, 2015). Research in consumer psychology identified two sources

3

of experiential purchases: ordinary (common and frequent) and extraordinary (uncommon and infrequent), and demonstrated that extraordinary ones are more likely to be remembered positively and last longer in one's memory than material goods and ordinary experiences (Bhattacharjee & Mogilner, 2014).

Relatively missing in the extant literature is how consumption relates to life satisfaction in developing or transition economies. The vast majority of related studies have been conducted in countries with a high standard of living, where most people live above the poverty line and have no difficulty fulfilling their basic consumption needs. However, in countries with a lower standard of living, basic consumption needs often remain unmet and conflict with a desire for higher-level needs (e.g., to experience new things or build social connections). Therefore, life satisfaction may have different relationships with consumption at lower levels of economic development. Indeed, studies like Cui (2018), Dumludag (2015), and Ozgen and Esiyok (2020) found that the role material purchase plays in life satisfaction is more pronounced in less-developed regions, like China and Eastern European countries. This issue has yet to be fully addressed in the context of South Korea ("Korea" hereafter). Korea provides an interesting institutional background for the study of the consumption–life satisfaction correlation due to its high elderly poverty rate (second highest in the OECD) and relatively underdeveloped old-age safety net.

This study aims to provide a comprehensive analysis of the association between consumption and life satisfaction among older Koreans (i.e., persons aged 50 or older).<sup>1</sup> The study poses the following research questions: (a) What types of consumption expenditure are associated with higher levels of life satisfaction (i.e., basic vs. conspicuous consumption; materialistic vs. experiential consumption; status, social, or material well-being consumption)?; and (b) Are there differences in life satisfaction levels between the effects of ordinary experiential purchases (for recreation and self-development) and extraordinary experiential purchases (for tourism and entertainment)? To answer the second research question, we exploit the provision of recreation

<sup>&</sup>lt;sup>1</sup> Older adults are defined as individuals aged 50 and over, following DeLeire and Kalil (2010), Kekäläinen, Wilska, and Kokko (2017), and Kwak (2011). This age is roughly equivalent to the average age at which Koreans leave their longest-held job (49.4 as of May 2020). Unlike the United States and other developed countries where people leave the labor force when they are entitled to a national pension (e.g., age 65 for the United States), South Korea does not have a specific age that can be regarded as a full retirement age. Therefore, we use a threshold age of 50 to identify the population subgroup of Koreans who may either have retired or have begun a transition to retirement.

and self-development programs for seniors in Korea, which are heavily subsidized by the government and offered through local community centers at affordable rates. Comparing the consumption of subsidized leisure activities with other classes of leisure expenditure allows us to determine whether satisfaction comes from ordinary or less-ordinary leisure events.

We contribute to the literature in several ways. First, we conduct a longitudinal assessment of the consumption–life satisfaction correlation. Using a method that exploits within-person variation in the data, we control for unobserved individual-specific effects and difference out individual heterogeneity in a subjective scaling of life satisfaction responses. Second, we use a representative sample of older adults, whereas previous studies have examined a general population comprising all ages or a small convenience sample in their experiments. Third, our study is the first to examine the consumption–happiness correlation for the Korean elderly. The unique setting of Korea allows us to examine the hedonic benefits of consumption in a transition economy and a society based on strong social ties.

# 2. LITERATURE REVIEW AND HYPOTHESIS DEVELOPMENT

#### 2.1. Hedonic return on material and experiential purchases

The idea that experiential purchases bring more happiness than material purchases has been an area of active research in consumer studies. The distinction between material and experiential purchases is conceptualized in terms of purchase intention (Van Boven & Gilovich, 2003). Material purchases are "those made with the primary intention of acquiring a material good" that is kept in one's possession for an extended period. Experiential purchases, in contrast, are "those made with the primary intention of acquiring a life experience." Examples of experiential purchases include events like trips, concerts, and movies, which are intangible and exist only for a limited time. The boundary separating material from experiential purchases is fuzzy, with some goods falling in the middle of the material–experiential continuum. However, this classification appears to be well-grasped by research participants and coders in experiments (Carter & Gilovich, 2010).

The distinctive characteristic of experiential consumption was formally conceptualized in the "experience economy" model (Pine & Gilmore, 1999). This model differentiated the consumer experience on two levels—in terms of (a) the degree of customer involvement (passive vs. active participation) and (b) the desire with which the customer connects or engages with the event (immersion vs. absorption). Further, it categorized experiential outcomes into four experiential dimensions: entertainment (passive/absorption), education (active/absorption), esthetic (passive/immersion), and escapist (active/immersion). According to this model, entertainment experience (for example) emerges when the consumer passively participates in the event, but their attention is fully occupied with experience. Educational experience requires active participation in the event (in which the consumer directly influences the event), with the consumer's mind fully engaged in the experience. The esthetic experience occurs when the consumer does not directly participate in the event, and their state is physically or virtually part of the event. In the experience economy model, retailers are conceptualized as sources of memories (not just goods) who play the role of "experience stager," rather than of service provider.

Empirical evidence that people derive more enduring satisfaction from experiential purchases than from material possessions has been reported in many different experimental settings and with the use of several methods (Caprariello & Reis, 2013; Carter & Gilovich, 2012; Kumar & Gilovich, 2015; Kumar, Killingsworth, & Gilovich, 2014; Nicolao, Irwin, & Goodman, 2009; Pchelin & Howell, 2014; Rosenzweig & Gilovich, 2012; Thomas & Millar, 2013). In the most straightforward demonstration, participants were asked to recall a material or experiential purchase of significance and rate it in terms of how happy the purchase made them. Not only did they report that they derived more satisfaction from the experiential purchase than from the material purchase, but they also exhibited a better mood when contemplating their experiences (Van Boven & Gilovich, 2003). A greater hedonic return on experiential purchases has been confirmed across an assortment of demographic and socioeconomic characteristics (e.g., age, race, gender, income, marital status, and country region).

Several mechanisms have been suggested to explain the greater satisfaction obtained from experiential purchases. The first assertion rests on the notion that people evaluate their experiences less comparatively (Carter & Gilovich, 2010; Rosenzweig & Gilovich, 2012). Experiences like vacations and concerts are evaluated more on their own terms, whereas tangible goods like electronics or vehicles tend to be assessed more comparatively in relation to those in the same product category. Comparative assessment often leads to regret and disappointment over what could have been earned if an alternative had been chosen, thus undermining satisfaction with the product selected.

The second benefit of an experiential purchase comes from its social nature. Going to concerts, restaurants, or sporting events is done with fellow music lovers, foodies, and people rooting for the same team. The material goods we buy are sometimes shared with others (e.g., giving friends a ride in a new BMW) but not consistently so. Through the consumption of experiential goods, we get an opportunity to further develop social capital and fulfill the basic psychological need for belonging (Caprariello & Reis, 2013; Kumar & Gilovich, 2015).

In addition, satisfaction obtained from experiential purchases is less prone to adaptation. The pleasure of acquiring a tangible good fades quickly; a new car, house, or gadget soon loses that new-product feel and leaves only its financial consequences. Research on the long-term benefits of consumption found that satisfaction with a material purchase drops more steadily over time, while that derived from an experiential purchase declines only a little or exhibits no decline at all (Carter & Gilovich, 2010; Nicolao et al., 2009).

Finally, experiences are more closely connected to identity than are material possessions. In Carter and Gilovich (2012), participants were asked to list the five most important experiential and material purchases they had ever made and to write a summary of their "life story" based on one purchase from the lists. Not only did the participants mention experiential purchases more often in their memoir, but they also derived more satisfaction from doing so. In a related study, where participants were asked to imagine the prospect of being able to "delete" memories, they were more protective of memories related to experiences than of those related to material purchases. Further evidence that experiential purchases constitute identity has been reported in Dogan (2015), Kumar and Gilovich (2015), and Thomas and Millar (2013).

# 2.2. Ordinary versus extraordinary experiences

The finding that greater satisfaction is obtained from experiential purchases has spurred a discussion on what types of experience should be pursued. One question regarding experiential purchase categories examined by the research is the difference between ordinary and extraordinary experiences. According to this stream of literature, extraordinary experiences are conceptualized as absorbing and eye-catching, providing emotionally intense experiences. In contrast, ordinary experiences are more routine and mundane and bounded within one's daily life (Bhattacharjee & Mogilner, 2014; Keinan & Kivetz, 2011). Products in a class that gives extraordinary experiences might differ in that they target consumers who look for meaning in and perspective on their lives

(Ranjan, 2018). It was suggested that the desire to seek the extraordinary stems in part from a sense of dissatisfaction with the routine works and a social environment focusing more on specialization and rationalization (Tumbat & Belk, 2011). The postmodern consumer seeks to reconnect with the sense of passion, excitement, and mystery that has been drained out of everyday life.

Arnould and Price's (1993) qualitative research on a river rafting trip highlighted the role transformational experiences play in inspiring tourists. Participants described river rafting as "an unforgettable, affectively-charged experience" and an opportunity "to commune with nature, friends, family, and strangers." The overall experiences were described as "exciting, thrilling, magical," and potentially transformational, giving participants a means of reconsidering their identity. Similarly, Celsi, Rose, and Leigh (1993) found that participation in a high-risk activity like skydiving is considered a valuable resource for constructing personal narratives and redefining identities. Knobloch, Robertson, and Aitken (2014) suggested that experiences at tourism destinations that induce strong emotional reactions are more likely to be reinterpreted positively and stay in memory.

Satisfaction with ordinary and extraordinary experiences appears to show a strong age gradient over the life cycle. Bhattacharjee and Mogilner (2014) recruited participants aged 18 to 79 and asked them to rate their ordinary and extraordinary experiences in terms of how much they contributed to their happiness. The results showed that extraordinary moments are strongly related to happiness, regardless of the participant's age. However, participants who felt that ordinary experience also mattered to their happiness were more common for the older age groups. Older participants saw ordinary moments as more self-defining and something they needed to pursue before it was too late. The finding that happiness often comes from ordinary moments also appeared in earlier studies, like DeVoe and House (2012) and Quoidbach, Berry, Hansenne, and Mikolajczak (2010).

#### **2.3.** Consumption and life satisfaction

A growing body of research has examined whether the momentary hedonic gain from consumption extends to life satisfaction, a more long-term view of life (Brown & Gathergood, 2017; Dumludag, 2015; Gokdemir, 2015; Vredeveld, 2020; Wang et al., 2019; Zimmermann, 2014). For instance, DeLeire and Kalil (2010) examined Americans aged 50 or older involved in the Health and Retirement Study and found that life satisfaction was higher to a moderate degree

for those who spent more on leisure. The primary pathways for increased life satisfaction were social connectedness and time engaged in social activities, highlighting the role of leisure as an experiential good. Similarly, Noll and Weick's (2015) study using German household panel data showed that life satisfaction is generally increasing in consumption, especially when the money goes to clothing and leisure. The association between consumption and life satisfaction was weak for those at the lower end of the consumption distribution, which could be the results of necessities making little contribution to consumer well-being. Furthermore, Dumludag (2015) showed that the association between consumption and life satisfaction between the stage; spending on utilities could increase life satisfaction in less-developed countries but may have little effect in developed countries.

An alternative research stream found increased life satisfaction among those who voluntarily chose to consume less, a phenomenon known as "anti-consumption" (see Oral & Thurner, 2019, for a review). In general, anti-consumption originates from the micro-level motivation to go against unethical practices in marketing and is magnified through concerns for environment and sustainability (Black & Cherrier, 2010). The mechanism through which voluntary abstinence from consumption increases well-being is unclear, but one possible pathway is an altruistic belief that one is doing a good deed for human well-being. The negative relationship between consumption and consumer well-being (or life satisfaction) has been well-established in research focusing on consumers' desire for material acquisition and possessions (Belk, Ger, & Askegaard, 2003; Lee & Ahn, 2016; Shaw & Newholm, 2002).

#### 2.4. Satisfaction from consumption in South Korea

Research on consumption and life satisfaction in the Korean context is relatively sparse. Jeon and Kim (2011) gathered data on 402 Koreans aged 20 to 40 on their recent material purchases (clothing) and experiential purchases (dining out) and found that Korean consumers derive almost equal satisfaction from material and experiential goods. Through a separate interview with 16 women, they showed that consumers often derive more satisfaction from material goods than from experiential purchases due to the feeling of owning something, the pleasure obtained from the shopping experience, and the joy of finding underpriced items when shopping around for material goods. A subsequent work by Chun (2018) considered both material vs. experiential purchases and ordinary vs. extraordinary experiences in research on satisfaction

via consumption. The results showed that greater satisfaction was obtained for the purchases of extraordinary experiences through experiential goods. When the ordinary and extraordinary consumption groups were compared, the difference in satisfaction levels was not significant. Finally, Nam (2019) identified consumer empowerment related to food consumption as a determinant of satisfaction with food consumption among Korea adults. Our study extends this line of literature with a focus on general life satisfaction among Korean seniors and how it relates to various consumption categories with different experiential content.

#### 2.5. Research questions

The review above shows that the questions of whether consumption contributes to life satisfaction and, if it does, which categories of consumption exert this influence, have not been answered convincingly in the literature, especially in the Korean context. Previous studies were particularly limited in that they represented consumption behavior using only one or two product classes (Jeon & Kim, 2011; Nam, 2019) or based their analysis on a small convenience sample (Chun, 2018). We address these limitations by considering various consumption categories, ranging from the material vs. experiential consumption distinction to more detailed consumption classes involving leisure and recreation consumption. The study's research questions are as follows:

- Which class of consumption expenditure is associated with higher levels of life satisfaction (material vs. experiential, social vs. material)?
- Which class of consumption expenditure is associated with higher levels of life satisfaction when more narrowly defined consumption classes are considered?
- Do life satisfaction levels differ between ordinary and less-ordinary experiences?
- Do our results hold when the models control for individual and household characteristics?

#### **3. METHODS**

# 3.1. Data description

The study data are drawn from the 2008, 2010, 2012, 2014, and 2016 waves of the Korean Longitudinal Study of Aging (KLoSA). The KLoSA is a nationally representative longitudinal survey of Koreans aged 50 or above. It collects information on demographics, family composition, income and wealth, labor supply, and health and includes detailed questions on subjective wellbeing. The study employs multistage sampling stratified by geographical area and housing type.

Participants were interviewed by trained interviewers using computer-assisted personal interviewing methods.

The KLoSA provides two sets of consumption data. The main consumption data are gathered in Module E: Income and Consumption, which collected information on seven expenditure categories: food consumed at home, food consumed outside the home, public education, private education, housing and utilities, healthcare (out-of-pocket), and clothing. Since the 2014 survey, this battery has expanded through the addition of five more expenditure categories—insurance, vehicle-related, communication, leisure, and gifts—making it a survey of 12 different consumption types. In each group, respondents were asked to report the average amount their family spent every month during the past year (see Table A1). The data for all 12 expenditure categories are available in the 2014 and 2016 surveys.

Additional questions about leisure consumption were asked in Module G: Expectations and Quality of Life. Leisure activities are grouped into tourism, entertainment, recreation, and self-development. For each leisure type, respondents were asked to report average monthly expenses (recreation and self-development) or total annual expenses (tourism and entertainment) over the preceding year (see Table A1). These questions first appeared in the 2008 interview and were retained in the subsequent interviews with no changes in the wording. In our analysis, the annual expenditure for tourism and entertainment is converted into a monthly figure to match the measurement unit of the other consumption variables. All consumption responses were given in ten thousand KRW and were converted into 2016 KRW using the Korean consumer price index.<sup>2</sup>

We construct two sets of study samples according to the availability of consumption data. The analysis involving the main consumption data is based on the 2014 and 2016 surveys. After observations with missing values are removed, the study sample consists of 6920 observations from 3460 persons (sample A). The second dataset is used for the analysis of leisure consumption based on the 2008–2016 survey waves. After observations with missing values are removed, this study sample comprises 21,340 observations from 5534 persons (sample B).

# 3.2. Measure of life satisfaction

 $<sup>^{2}</sup>$  As of April 29, 2019, ten thousand KRW is equivalent to \$8.60.

The survey question for life satisfaction is as follows: "*To what degree are you satisfied with your overall quality of life?*" Respondents were provided with a numeric scale ranging from 0 to 100 (i.e., 0, 10, 20, 30...100) and were instructed to circle the figure that best represents their satisfaction level. The score is thus defined on a 0–100 scale, with higher scores indicating a more positive assessment of life. The mean of this variable is 60, and its standard deviation is approximately 17 (see Table 1). A similar discrete scale for life satisfaction was used in Gokdemir (2015).

#### **3.3.** Measures of consumption

We follow the literature and assort consumption categories into several types with similar characteristics. Specifically, the consumption variables are grouped into the following: (a) basic and conspicuous consumption; (b) materialistic and experiential consumption; and (c) status, social, and material well-being goods.

Category (a) classified consumption variables according to whether goods and services are consumed for utilitarian value or to indicate status. Following the approach used in Zimmermann (2014), we grouped goods with a visibility index of 0.5 or more into conspicuous consumption (food-at-home, food-away-from-home, clothing, and leisure) and those with less than 0.5 visibility into basic consumption (education, housing and utilities, healthcare, insurance, vehicle-related, communication, and gift). The visibility index, developed by Heffetz (2011), shows the speed with which social members notice a subject's consumption activities. The basic consumption category includes expenditures on necessities, which correspond to basic/security needs in Maslow's pyramid of needs (Maslow, 1943).

The second scheme sorted consumption expenditures according to whether the consumption is made to fulfill material needs or gain experiences (Cui, 2018). Materialistic consumption is obtained from the sum of expenditures on food-at-home, clothing, education, housing and utilities, healthcare, insurance, vehicle-related items, and communication. Experiential consumption includes spending on food-away-from-home, gifts, and leisure. The gift category (expenditures to celebrate with or offer condolences to significant others) is included in the experiential purchase group because giving a gift implies a certain kind of interaction with those who are on the receiving end of the gift.

Finally, following DeLeire and Kalil (2010), we defined categories for status-enhancing goods (clothing and vehicle-related), social goods (leisure and gifts), and material well-being goods (food-at-home, food-away-from-home, education, housing and utilities, healthcare, insurance, and communication). The amount spent on vehicles is assumed to proxy for luxury car ownership and/or related maintenance costs (Okulicz-Kozaryn, Nash, & Tursi, 2015).

Our analysis of the consumption variable proceeds in two steps. The first analysis examines the association between life satisfaction and the three sets of consumption variables. This analysis follows the same approach used in previous studies and explores whether similar patterns of association emerge in the Korean context. The second analysis examines the association between life satisfaction and leisure consumption variables (tourism, entertainment, recreation, and selfdevelopment). The single consumption category that has shown the greatest explanatory power in prior research was leisure consumption (DeLeire & Kalil, 2010). Examining leisure consumption separately helps us reveal the mechanism through which leisure consumption contributes to increased life satisfaction.

#### 3.4. Empirical specification

The regression equation for person *i* at time *t* is given by

$$y_{i,t} = \alpha_0 + \alpha_1 C_{i,t} + \alpha_2 X_{i,t} + v_i + \delta_i + \tau_t + \varepsilon_{i,t}$$

$$\tag{1}$$

The outcome variable  $y_{i,t}$  is the life satisfaction score, and  $C_{i,t}$  is a set of consumption variables. The regressions include year-of-survey fixed effects ( $\tau_t$ ) and province dummies ( $\delta_i$ ) to account for a secular trend in life satisfaction that has a common effect on persons surveyed at the same time or living in the same region. The covariate matrix  $X_{i,t}$  includes age and age squared, educational background, marital status, self-rated health, health insurance ownership, labor force supply, household income, homeownership, and total net worth. The age effect enters the regression in quadratic form to allow for a non-linear relationship between age and life satisfaction. Educational background is captured by binary variables for middle school, high school, and college graduates (with those with less than middle school education forming a reference group). The selfrated health dummy takes a value of one if the respondent assessed their overall health as good, very good, or excellent. The labor force supply variables include dummy variables reflecting working for pay and working without pay (with those not working forming a reference group). Household income is the total amount of income earned by the respondent's family over the last 12 months. Total net worth is the sum of all financial and non-financial assets minus debts (including mortgages). The income and consumption variables enter the regression in the log form. Total net worth is transformed by log-modulus transformation to retain negative values.

Eq. (1) is estimated by the individual fixed effects (FE) OLS regression. This method demeans all variables in the regression (including  $v_i$ ) and exploits only within-person variations for the estimation. The coefficient estimates show changes in life satisfaction explained by changes in the regressors.

The FE model has advantages over the cross-sectional regression in that it accounts for interpersonal comparability in the life satisfaction responses. The basic premise in happiness research is that individuals use roughly the same or similar judgments in assessing their life satisfaction (Krueger & Schkade, 2008). For instance, an individual with a satisfaction score of 10 is assumed to be strictly happier than one with a score of 8. Using the FE model does not require this interpersonal comparability assumption to hold. As the FE model exploits only within-person variation, regression estimates are based on changes in life satisfaction responses explained by changes in consumption and other regressors over time. Thus, differences in satisfaction assessments between persons may have limited influence on the FE regression estimates. As long as the way people assess their lives does not change systematically over time, life satisfaction responses recorded at different periods can be compared without loss of reliability.

# 4. RESULTS

Table 1 presents the mean and standard deviation of the variables used in this study. The mean age of participants is 68.52 (66.03 for sample B), and the standard deviation is 9.76 (10.46 for sample B). Their educational background is limited; only one-third hold a high school diploma, and about half did not complete middle school. The labor force supply is considerably high; one in three participants reported that they are currently employed or working without a salary. The average household earned 25,339 thousand KRW the preceding year (25,979 thousand KRW for sample B) and held 146,949 thousand KRW net worth (124,336 thousand KRW for sample B). The mean monthly household consumption is 1274 thousand KRW in both samples.

# [Insert Table 1 about here]

Table 2 shows the distribution of the consumption variables. We see that about half of the monthly household expenditures goes toward three categories: food-at-home, housing and utilities,

and insurance. We also find that households spent a significant amount on the food-away-fromhome, communication, healthcare, and vehicle-related categories. The mean amount paid for private education is only 27 thousand KRW, partly because many participants do not have schoolage children. The mean expenditure for leisure is 42 thousand KRW, with a median of 20 thousand KRW and a 25th percentile of 0.

# [Insert Table 2 about here]

Table 3 reports the estimates for the regression of life satisfaction on consumption types and covariates. A regression in each column controls for a different set of consumption type variables. The estimates for year fixed effects and province dummies have been omitted for brevity.

Column (1) shows that basic and conspicuous consumption types have a heterogeneous impact on life satisfaction. The coefficient estimate on basic consumption is negative and statistically significant at the 5% level, due in part to the effect of healthcare expenses, as demonstrated in the subsequent analyses. The coefficient estimate on conspicuous consumption, conversely, is positively significant at 1% and carries a larger effect in absolute terms. The coefficient estimate of 2.146 shows that, for a 10% increase in conspicuous consumption life satisfaction rises by 0.2146 points (or by 0.36% evaluated at the sample mean of life satisfaction). While this association appears modest, comparing it to other coefficient estimates suggests that its effect is as large as having good or better health, being employed, or having national health insurance. It also carries approximately double the impact of the same proportional increase in household income and is 15 times greater than the impact of total net worth.

Column (2) shows a similar pattern in the association between consumption and life satisfaction. Goods classified as materialistic are associated with lower life satisfaction, while the consumption groups that involve experiences are associated with higher satisfaction. However, the coefficient estimate on materialistic consumption is not estimated with enough precision to reject the null hypothesis at the 10% level. The estimate on experiential goods is significant at the 1% level.

Column (3) suggests that, for a 10% increase in social consumption the life satisfaction score increases by 0.073 points. The coefficient estimate on status-enhancing goods is positive but not different from zero at the 10% level. As in the previous columns, the coefficient estimate on material well-being goods carries a negative sign.

[Insert Table 3 about here]

The weakness of regressions with consumption-type indicators is that they do not allow us to determine the source of the consumption effect. One or two consumption categories may have a much stronger impact than other types, or those assumed to have similar characteristics may have a uniform effect on satisfaction. To evaluate these possibilities, we modeled the consumption categories separately. Column (1) in Table 4 presents estimates for a fully specified model equivalent to eq. (1). Regressions in the following columns exclude individual- and household-level controls (column 2) or all right-hand-side variables (column 3) as a robustness check.

We find that the results in Table 3 are driven by two consumption categories—healthcare and leisure. Across three different specifications, the associations between life satisfaction and healthcare spending remain negative, and the corresponding associations with leisure consumption are consistently positive. The coefficient estimates on these associations carry large *t*-values and reject the null hypothesis at the 5% level. The regression results are robust to the exclusion of some or all of the control variables from the regression. Looking at the definitions of the consumption types, we find that the only category that belongs to conspicuous, experiential, and social consumption is leisure. This points to leisure consumption as the most likely source of life satisfaction among Korean seniors.

# [Insert Table 4 about here]

Next, we investigate further to determine which types of leisure are associated with greater life satisfaction. Taking advantage of leisure consumption data in the KLoSA, we estimate regression models that link life satisfaction with the different types of leisure consumption. This analysis uses sample B (21,340 observations for the 2008–2016 waves) and four variables of leisure expenditure: tourism, entertainment, recreation, and self-development. As noted above, we assume that tourism and entertainment are experiential goods that provide extraordinary experiences and assume that recreation and self-development programs give rise to more ordinary experiences that occur regularly. We focus on whether the association between life satisfaction and tourism/entertainment consumption differs significantly from the corresponding association with recreation and self-development expenses.

The estimates are presented in Table 5. The regressions used for this analysis control for all covariates in eq. (1) and also a measure of total consumption (the sum of food-at-home, food-away-from-home, public/private education, housing and utilities, healthcare, and clothing). As in

Table 4, we first estimate a fully saturated model (column 1) and show the robustness of the findings by estimating regressions without covariates and fixed effects (columns 2 and 3).

The coefficient estimates on tourism and entertainment activities are positive and statistically significant at the 1% level. However, the coefficient estimates on government-subsidized leisure carry an unexpected sign (recreation) or are not different from zero at the 5% level (self-development). These results suggest that leisure is associated with greater life satisfaction mainly through its provision of extraordinary experiences.

[Insert Table 5 about here]

#### **5. CONCLUSION**

This study conducted an empirical test on the relationship between consumption and life satisfaction in later life. Taking advantage of the rich consumption data in the KLoSA, we examined what types of purchases have the most significant influence on satisfaction with life. The study's three main findings are as follows. First, life satisfaction was positively associated with conspicuous, experiential, and social consumption, and negatively associated with expenditures for necessities and material goods. Second, modeling each consumption category separately, we found that leisure was the only consumption category that led to increased life satisfaction. As leisure belongs to all consumption categories that had a positive association with life satisfaction, this result might suggest that leisure spending is the primary pathway leading to increased life satisfaction. Third, among leisure goods, tourism and entertainment were the only consumption categories positively associated with life satisfaction. The coefficient estimates involving recreation and self-development expenses were not statistically significant. This result may occur because, in South Korea, recreation and self-development programs are mundane events that occur regularly within the boundary of everyday life, while tourism and entertainment events are uncommon and rarely consumed among older persons. Our findings are thus broadly in line with the evidence that extraordinary experiences give a greater hedonic return.

A plausible explanation for this finding is that the joy felt from an extraordinary experience is amplified through retrospective evaluation. Extraordinary experiences tend to be a good source of storytelling. After spending time on a beach or watching a new movie, people mentally revisit their experiences and share them with their friends and family through storytelling. This process of re-evaluation makes memories about the experiences more enduring and less prone to adaptation (Kumar & Gilovich, 2015). The psychology literature has shown that experiential purchases produce utility at the time of sale as well as through retrospective evaluation and re-interpretation and that they generally lead to consumer satisfaction greater than that generated by material possessions (Mitchell, Thompson, Peterson, & Cronk, 1997; Ryynänen & Heinonen, 2018).

Another source of utility from extraordinary purchases is anticipation periods. Deviations from the routines of daily life—ranging from attending concerts to going on a month-long overseas trip—require careful planning prior to purchase (Kumar et al., 2014). For instance, going to a long-awaited sports event with family members may lead the planner to assess different lodging options and famous restaurants in the vicinity. Thinking about the joyful experiences each option offers is an important source of excitement about upcoming experiences. Consumers often draw more utility from planning a vacation than from the vacation itself, which can be plagued by unexpected challenges and turmoil (Nawijn, Marchand, Veenhoven, & Vingerhoets, 2010).

Our results also corroborate the evidence that different kinds of leisure are associated with different domains of subjective well-being. For instance, Brown, MacDonald, and Mitchell (2015) found that the association between leisure and subjective well-being was significant for active leisure activities but not for passive leisure. Similarly, a study on Finnish elderly found that only travel had a positive influence on both the mental and physical domains of well-being; other activities like exercise affected only physical well-being (Kekäläinen et al., 2017). As found in our study, the literature has suggested that it is not just having leisure experiences, but the content and quality of the leisure that matters to satisfaction outcomes in later life (Carstensen, Isaacowitz, & Charles, 1999; DeLeire & Kalil, 2010; Headey, Muffels, & Wooden, 2008).

The limited effect of material purchases on life satisfaction re-affirms the conventional wisdom that "spending on material goods can't buy happiness." According to Maslow's pyramid of needs (Maslow, 1943), striving for material goods never fulfills intrinsic human desires (Kasser & Ryan, 1993). Once material needs are met, higher levels of utility can be reached only through activities that fulfill growth needs. For money to increase life satisfaction, it must be spent on things or events that fill higher level needs – those that provide meaning to and perspective on life.

This study is subject to several limitations. First, our measure of subjective well-being is limited to the domain of life satisfaction. Happiness research uses "subjective well-being" as a blanket term for cognitive aspects (evaluation of circumstances through critical thinking) and affective aspects (instant feelings about events) of well-being (Lucas, Diener, & Suh, 1996). Life

satisfaction is known to capture only the cognitive aspects of well-being (Zimmermann, 2014), which generally exhibit little change over time compared to affective measures (Krueger & Schkade, 2008). One should be cautious not to draw implications for affective well-being from our findings. Second, our study design uses secondary data and does not reflect in-the-moment assessments of purchases. As the survey provides no information on the timing of each purchase, we are unable to assess whether the association between consumption and life satisfaction is due to retrospective assessments of prior purchases or the pleasure associated with a current purchase. Third, the study does not establish causality. Guven (2012) showed the potential simultaneous relationship between happiness and consumption and argued that ignoring this simultaneity leads to an underestimation of the effect of consumption has on happiness. This suggests that our regression estimates should be understood as lower bounds.

The COVID-19 pandemic and the accompanying economic downturn are expected to induce a lasting change in how consumers purchase goods and services. As lock-downs and related social distancing measures go into effect, consumer priorities have been re-structured around fulfilling basic needs. Digital commerce has also seen a boost as more consumers migrate into the online shopping marketplace. This trend is likely to continue in the post-pandemic era, accelerating the transition from shopping at brick-and-mortar retailers to eCommerce. Consumer response and adaptation to this "new normal" offer a fertile new context wherein researchers in consumer studies can conduct research with valuable end-user benefits. Future research could consider how the fear response to contagious disease cues affects how people approach and consume experiential goods. Consumers who feel their security is being undermined may respond by re-establishing a feeling of structure and security through the consumption of familiar and comforting goods (Galoni, Carpenter, & Rao, 2020). Future research needs to apply this framework to the choice of leisure services with varying degrees of experiential content to determine which types of leisure will suffer lasting effects and which will quickly recover. Moreover, little is known about experiential purchases through eCommerce and omnichannel services and their potential as alternatives for consumers to fulfill their self-actualization needs. The core objectives of experiential purchases, such as making interactions with people and experiencing new things, can also be achieved online through various online marketplaces and social network services. The surge in digital and omnichannel adoption, as well as those excluded from it, offers an interesting setting in which to

study the role digital adoption plays in promoting experiential purchases and how it affects consumer well-being.

[Insert Table A1 about here]

# References

- Arnould, E. J., & Price, L. L. (1993). River magic: Extraordinary experience and the extended service encounter. *Journal of Consumer Research*, 20(1), 24–45.
- Belk, R. W., Ger, G., & Askegaard, S. (2003). The fire of desire: A multisited inquiry into consumer passion. *Journal of Consumer Research*, *30*(3), 326–351.
- Bhattacharjee, A., & Mogilner, C. (2014). Happiness from ordinary and extraordinary experiences. *Journal of Consumer Research*, *41*(1), 1–17.
- Black, I. R., & Cherrier, H. (2010). Anti-consumption as part of living a sustainable lifestyle:
  Daily practices, contextual motivations and subjective values. *Journal of Consumer Behaviour*, 9(6), 437–453.
- Brown, G. D. A., & Gathergood, J. (2015). *Consumption and life satisfaction: A micro panel data study*. Unpublished manuscript.
- Brown, J. L., MacDonald, R., & Mitchell, R. (2015). Are people who participate in cultural activities more satisfied with life?. *Social Indicators Research*, *122*(1), 135–146.
- Caprariello, P. A., & Reis, H. T. (2013). To do, to have, or to share? Valuing experiences over material possessions depends on the involvement of others. *Journal of Personality and Social Psychology*, 104(2), 199–215.
- Carstensen, L. L., Isaacowitz, D. M., & Charles, S. T. (1999). Taking time seriously. A theory of socioemotional selectivity. *The American Psychologist*, 54(3), 165–181.
- Carter, T. J., & Gilovich, T. (2010). The relative relativity of material and experiential purchases. *Journal of Personality and Social Psychology*, *98*(1), 146–159.
- Carter, T. J., & Gilovich, T. (2012). I am what I do, not what I have: The differential centrality of experiential and material purchases to the self. *Journal of Personality and Social Psychology*, *102*(6), 1304–1317.
- Celsi, R. L., Rose, R. L., & Leigh, T. W. (1993). An exploration of high-risk leisure consumption through skydiving. *Journal of Consumer Research*, 20(1), 1–23.
- Chun, M. (2018). A study on happiness from ordinary experiential consumption and extraordinary experiential consumption [Unpublished master's thesis]. Seoul National University.
- Cui, Z. (2018). Happiness and consumption: Evidence from China. *International Review of Economics*, 65(4), 403–419.

- DeLeire, T., & Kalil, A. (2010). Does consumption buy happiness? Evidence from the United States. *International Review of Economics*, *57*(2), 163–176.
- DeVoe, S. E., & House, J. (2012). Time, money, and happiness: How does putting a price on time affect our ability to smell the roses?. *Journal of Experimental Social Psychology*, 48(2), 466–474.
- Dogan, V. (2015). The effect of materialism and proximity of clothing to self on the ratio of feeling younger: Implications for the consumption experiences of older people in Turkey. *International Journal of Consumer Studies*, 39(5), 564–573.
- Dumludag, D. (2015). Consumption and life satisfaction at different levels of economic development. *International Review of Economics*, *62*(2), 163–182.
- Easterlin, R. A. (1995). Will raising the incomes of all increase the happiness of all?. *Journal of Economic Behavior & Organization*, 27(1), 35–47.
- Galoni, C., Carpenter, G. S., & Rao, H. (2020). Afraid and Disgusted: Consumer choices under the threat of contagious disease. *Journal of Consumer Research*. Advance online publication. doi:10.1093/jcr/ucaa025
- Gokdemir, O. (2015). Consumption, savings and life satisfaction: The Turkish case. *International Review of Economics*, *62*(2), 183–196.
- Guven, C. (2012). Reversing the question: Does happiness affect consumption and savings behavior?. *Journal of Economic Psychology*, *33*(4), 701–717.
- Headey, B., Muffels, R., & Wooden, M. (2008). Money does not buy happiness: Or does it? A reassessment based on the combined effects of wealth, income and consumption. *Social Indicators Research*, 87(1), 65–82.
- Heffetz, O. (2011). A test of conspicuous consumption: Visibility and income elasticities. *Review* of *Economics and Statistics*, 93(4), 1101–1117.
- Jeon, M. & Kim, R. (2011). Do experiences make people happier than material possessions?. *Consumer Policy and Education Review*, 7(2), 55–75.
- Kasser, T., & Ryan, R. M. (1993). A dark side of the American dream: Correlates of financial success as a central life aspiration. *Journal of Personality and Social Psychology*, 65(2), 410– 422.
- Keinan, A., & Kivetz, R. (2011). Productivity orientation and the consumption of collectable experiences. *Journal of Consumer Research*, *37*(6), 935–950.

- Kekäläinen, T., Wilska, T. A., & Kokko, K. (2017). Leisure consumption and well-being among older adults: Does age or life situation matter?. *Applied Research in Quality of Life*, 12(3), 671–691.
- Knobloch, U., Robertson, K., & Aitken, R. (2014). (Mis)understanding the nature of tourist experiences. *Tourism Analysis*, 19(5), 599–608.
- Krueger, A. B., & Schkade, D. A. (2008). The reliability of subjective well-being measures. *Journal of Public Economics*, 92(8–9), 1833–1845.
- Kumar, A., & Gilovich, T. (2015). Some "thing" to talk about? Differential story utility from experiential and material purchases. *Personality and Social Psychology Bulletin*, 41(10), 1320– 1331.
- Kumar, A., Killingsworth, M. A., & Gilovich, T. (2014). Waiting for Merlot: Anticipatory consumption of experiential and material purchases. *Psychological Science*, 25(10), 1924– 1931.
- Kwak, I. (2011). Life satisfaction of future elderly and the elderly. *Family and Environment Research*, 49(1), 107–120.
- Lee, M. S., & Ahn, C. S. Y. (2016). Anti-consumption, materialism, and consumer well-being. *Journal of Consumer Affairs*, 50(1), 18–47.
- Lucas, R. E., Diener, E., & Suh, E. (1996). Discriminant validity of well-being measures. *Journal of Personality and Social Psychology*, *71*(3), 616–628.
- Lynbomirsky, S., Sheldon, K. M., & Schkade, D. (2005). Pursuing happiness: The architecture of sustainable change. *Review of General Psychology*, *9*(2), 111–131.
- MacDonald, M., & Douthitt, R. A. (1992). Consumption theories and consumers' assessments of subjective well-being. *Journal of Consumer Affairs*, *26*(2), 243–261.
- Maslow, A. H. (1943). A theory of human motivation. Psychological Review, 50(4), 370–396.
- Mitchell, T. R., Thompson, L., Peterson, E., & Cronk, R. (1997). Temporal adjustments in the evaluation of events: The "rosy view". *Journal of Experimental Social Psychology*, 33(4), 421–448.
- Nam, S. J. (2019). The effects of consumer empowerment on risk perception and satisfaction with food consumption. *International Journal of Consumer Studies*, *43*(5), 429–436.
- Nawijn, J., Marchand, M. A., Veenhoven, R., & Vingerhoets, A. J. (2010). Vacationers happier, but most not happier after a holiday. *Applied Research in Quality of Life*, 5(1), 35–47.

- Neulinger, A., & Radó, M. (2018). The impact of household life-cycle stages on subjective wellbeing: Considering the effect of household expenditures in Hungary. *International Journal of Consumer Studies*, 42(1), 16–26.
- Nicolao, L., Irwin, J. R., & Goodman, J. K. (2009). Happiness for sale: Do experiential purchases make consumers happier than material purchases? *Journal of Consumer Research*, 36(2), 188–198.
- Noll, H. H., & Weick, S. (2015). Consumption expenditures and subjective well-being: Empirical evidence from Germany. *International Review of Economics*, *62*(2), 101–119.
- Okulicz-Kozaryn, A., Nash, T., & Tursi, N. O. (2015). Luxury car owners are not happier than frugal car owners. *International Review of Economics*, *62*(2), 121–141.
- Oral, C., & Thurner, J. Y. (2019). The impact of anti-consumption on consumer well-being. *International Journal of Consumer Studies*, 43(3), 277–288.
- Ozgen, O., & Esiyok, E. (2020). Consumer ethics, materialism and material satisfaction: A study on Turkish adolescent consumers. *International Journal of Consumer Studies*, *44*(1), 14–24.
- Pchelin, P., & Howell, R. T. (2014). The hidden cost of value-seeking: People do not accurately forecast the economic benefits of experiential purchases. *The Journal of Positive Psychology*, *9*(4), 322–334.
- Pine, J., & Gilmore, J. H. (1999). *The experience economy: Work is theater & every business a stage*. Boston, MA: Harvard Business School Press.
- Quoidbach, J., Berry, E. V., Hansenne, M., & Mikolajczak, M. (2010). Positive emotion regulation and well-being: Comparing the impact of eight savoring and dampening strategies. *Personality and Individual Differences*, 49(5), 368–373.
- Ranjan, P. (2018). Experiential consumption: A review. *Journal of Marketing Vistas*, 8(2), 28–39.
- Rosenzweig, E., & Gilovich, T. (2012). Buyer's remorse or missed opportunity? Differential regrets for material and experiential purchases. *Journal of Personality and Social Psychology*, *102*(2), 215–223.
- Ryynänen, T., & Heinonen, V. (2018). From nostalgia for the recent past and beyond: The temporal frames of recalled consumption experiences. *International Journal of Consumer Studies*, *42*(1), 186–194.

- Shaw, D., & Newholm, T. (2002). Voluntary simplicity and the ethics of consumption. *Psychology & Marketing*, *19*(2), 167–185.
- Thomas, R., & Millar, M. (2013). The effects of material and experiential discretionary purchases on consumer happiness: Moderators and mediators. *The Journal of Psychology*, *147*(4), 345–356.
- Tumbat, G., & Belk, R. W. (2011). Marketplace tensions in extraordinary experiences. *Journal* of Consumer Research, 38(1), 42–61.
- Van Boven, L., & Gilovich, T. (2003). To do or to have? That is the question. *Journal of Personality and Social Psychology*, *85*(6), 1193–1202.
- Vredeveld, A. J. Materialism and life satisfaction: The moderating roles of alexithymia and product retention tendency. *International Journal of Consumer Studies*. Advance online publication. doi:10.1111/ijcs.12606
- Wang, H., Cheng, Z., & Smyth, R. (2019). Consumption and happiness. *Journal of Development Studies*, 55(1), 120–136.
- Xiao, J. J., & Li, H. (2011). Sustainable consumption and life satisfaction. *Social Indicators Research*, *104*(2), 323–329.
- Zimmermann, S. (2014). *The pursuit of subjective well-being through specific consumption choice*. Unpublished manuscript.

# Tables

 Table 1. Summary Statistics

Variable	Sample A ( <i>N</i> =6920)		Sample B ( <i>N</i> =21,340)	
	Mean	SD	Mean	SD
Life satisfaction	60.28	16.70	59.88	17.90
Age	68.52	9.76	66.03	10.46
Less than middle school	0.48	0.50	0.49	0.50
Middle school	0.16	0.37	0.17	0.37
High school	0.28	0.45	0.26	0.44
College	0.08	0.27	0.08	0.27
Married	0.62	0.48	0.66	0.47
SR health: good or better	0.39	0.49	0.42	0.49
National health insurance	0.94	0.24	0.93	0.25
Private health insurance	0.32	0.47	0.32	0.46
Work for pay	0.30	0.46	0.31	0.46
Work without pay	0.04	0.19	0.05	0.22
Not working	0.66	0.47	0.64	0.48
Household income (annual)	2533.9	2398.1	2597.9	2740.3
Home ownership	0.81	0.39	0.80	0.40
Total consumption (monthly)	127.4	91.3	127.4	91.0
Total net worth	14,694.9	27,394.6	12,433.6	26,259.7

*Notes*: Sample A is based on the KLoSA 2014 and 2016; Sample B is based on the KLoSA 2008, 2010, 2012, 2014, and 2016. All monetary figures are adjusted to 2016 KRW using the Korean consumer price index and expressed in ten thousand KRW.

Variable	Mean	P25	P50	P75
Consumption categories (sample	ple A; N=6920)			
Food-at-home	39.1	20.3	30.5	50.8
Food-away-from-home	8.9	1.0	5.1	10.2
Public education	5.6	0	0	0
Private education	2.7	0	0	0
Housing and utilities	16.7	10.2	15.3	20.3
Healthcare	8.6	3.0	5.1	10.2
Clothing	7.2	2.0	5.0	10.0
Insurance	11.5	0	0	20.0
Vehicle-related	8.4	0	0	15.0
Communication	8.8	4.0	7.0	10.0
Leisure	4.2	0	2.0	5.0
Gift	5.6	2.0	5.0	10.0
Leisure consumption (sample	B; <i>N</i> =21,340)			
Tourism	2.0	0	0	1.0
Entertainment	0.1	0	0	0
Recreation	0.2	0	0	0
Self-development	0.1	0	0	0

Table 2. Distribution of Consumption Variables

*Notes*: Sample A is based on the KLoSA 2014 and 2016; Sample B is based on the KLoSA 2008, 2010, 2012, 2014, and 2016. All figures are adjusted to 2016 KRW using the Korean consumer price index and expressed in ten thousand KRW.

Table 3. Regression with C	(1)	(2)	(3)
Log(basic)	-1.394**	(-)	(9)
	(0.551)		
Log(conspicuous)	2.146***		
Log(compreaded)	(0.616)		
Log(materialistic)	(0.010)	-1.153	
		(0.709)	
Log(experiential)		0.995***	
		(0.317)	
Log(status)			0.542
			(0.335)
Log(social)			0.733**
			(0.295)
Log(material well-being)			-1.204*
5			(0.718)
Age	-1.877	-2.002	-2.206
5	(1.642)	(1.645)	(1.649)
Age squared	0.004	0.005	0.006
	(0.007)	(0.007)	(0.007)
Middle school	9.920	10.155	11.660
	(10.787)	(10.793)	(10.793)
High school	-5.323	-5.158	-5.238
e	(6.251)	(6.254)	(6.255)
College	-3.415	-3.479	-3.631
e	(6.543)	(6.547)	(6.548)
Married	-0.499	-0.182	-0.342
	(1.361)	(1.366)	(1.363)
SR health: good or better	2.165***	2.180***	2.179***
C C	(0.526)	(0.526)	(0.526)
National health insurance	3.010**	2.954**	2.854*
	(1.467)	(1.467)	(1.466)
Private health insurance	0.083	-0.046	0.017
	(0.625)	(0.624)	(0.624)
Work for pay	2.338***	2.231**	2.302***
	(0.868)	(0.870)	(0.869)
Work without pay	0.688	0.341	0.130
	(2.277)	(2.280)	(2.283)
Log(HH income)	1.044**	1.165**	1.180***
	(0.457)	(0.455)	(0.454)
Home ownership	0.592	0.615	0.601
_	(1.176)	(1.177)	(1.177)
Log(total net worth)	0.138**	0.141**	0.134**
	(0.066)	(0.066)	(0.066)
Year and Province FE	Yes	Yes	Yes
Ν	6920	6920	6920

**Table 3**. Regression with Consumption Type Variables

*Notes*: KLoSA 2014 and 2016. Standard errors in parentheses. \*\*\* p < 0.01; \*\* p < 0.05; \* p < 0.10.

	(1)	(2)	(3)
Log(food-at-home)	0.425	0.639	1.071*
	(0.629)	(0.618)	(0.614)
Log(food-away-from-home)	0.253	0.365	0.380
	(0.296)	(0.294)	(0.294)
Log(public education)	0.006	-0.042	-0.188
	(0.231)	(0.231)	(0.229)
Log(private education)	-0.328	-0.325	-0.480
	(0.330)	(0.331)	(0.329)
Log(housing and utilities)	-0.812	-0.730	-1.023
	(0.654)	(0.655)	(0.656)
Log(healthcare)	-0.839***	-0.854***	-0.758***
	(0.292)	(0.292)	(0.293)
Log(clothing)	0.209	0.222	0.040
	(0.380)	(0.380)	(0.380)
Log(insurance)	-0.110	-0.035	0.058
	(0.246)	(0.229)	(0.229)
Log(vehicle)	0.269	0.296	0.292
	(0.264)	(0.263)	(0.264)
Log(communication)	0.325	0.551	0.507
	(0.501)	(0.498)	(0.500)
Log(leisure)	0.637**	0.652**	0.739***
	(0.266)	(0.267)	(0.267)
Log(gift)	0.163	0.242	0.129
	(0.343)	(0.343)	(0.344)
Age effect	Yes	Yes	No
Individual and HH controls	Yes	No	No
Year and Province FE	Yes	Yes	No
Ν	6920	6920	6920

Table 4. Regressions with Consumption Category Variables

*Notes*: KLoSA 2014 and 2016. Standard errors in parentheses. \*\*\* p < 0.01; \*\* p < 0.05; \* p < 0.10.

	D					
	1200	100001010	1171th	01011#0	1 7 7 9 0	Vomoblog
таше э	пер	ressions	WIIII	Leisure	I VDE	Variables
1 4010 0.	1.02	,100010110		Leibaie	- <i>J</i> P •	, and the

	(1)	(2)	(3)
Log(tourism)	0.905***	1.087***	1.158***
	(0.158)	(0.159)	(0.158)
Log(entertainment)	2.160***	2.139***	2.302***
	(0.676)	(0.680)	(0.680)
Log(recreation)	-0.190	-0.162	-0.099
	(0.343)	(0.345)	(0.346)
Log(self-development)	1.272*	1.258*	1.149*
	(0.682)	(0.687)	(0.688)
Age effect	Yes	Yes	No
Individual and HH controls	Yes	No	No
Year and Province FE	Yes	Yes	No
Ν	21,340	21,340	21,340

 Notes: KLoSA 2008, 2010, 2012, 2014 and 2016. Standard errors in parentheses.

 \*\*\* p < 0.01; \*\* p < 0.05; \* p < 0.10. 

# Appendix

Categories	Wording	Survey years
Module E: Income and Co		
Food-at-home	During the past year, about how much food expenses did your family pay a month?	2008-2016
Food-away-from-home	During the past year, about how much per month did your family pay for dining out?	2008-2016
Public education	During the past year, about how much per month did your family pay for public education (education expenses associated with compulsory education)?	2008-2016
Private education	During the past year, about how much per month did your family pay for private education (education expenses associated with private tutoring)?	2008-2016
Housing and utilities	During the past year, about how much per month did your family pay for housing (rent, utilities, and home maintenance)?	2008-2016
Healthcare	During the past year, about how much per month did your family pay for medical services (not including health insurance premium)?	2008-2016
Clothing	During the past year, about how much per month did your family pay for clothing (apparel and shoes)?	2008-2016
Insurance	During the past year, about how much per month did your family pay for insurance coverage (not including life insurance)?	2014-2016
Vehicle-related	During the past year, about how much per month did your family pay for vehicles and it maintenance (including vehicle tax)?	2014-2016
Communication	During the past year, about how much per month did your family pay for cell phones and home phone lines?	2014-2016
Leisure	During the past year, about how much per month did your family pay for leisure services (travel, guided tour, picnic, movie, performance, exhibition, sports event, and hobby/recreation-related activities)?	2014-2016
Gift	During the past year, about how much cash gifts did your family spend a month?	2014-2016
Module G: Expectations a	nd Quality of Life	
Tourism	Over the last year, have you engaged in travel, guided tour, or picnic? If any, how much did you pay for it?	2008-2016
Entertainment	Over the last year, have you watched a movie or attended performance, concert, exhibition, or sports events? If any, how much did you pay for it?	2008-2016
Recreation	Over the last year, have you participated in hobby or recreation-related activities? If any, how much per month did you pay for it? You can think of affordable education classes for calligraphy, dancing, photography, singing, workout, and yoga provided by the local community center, county government, or welfare center.	2008-2016
Self-development	Over the last year, have you participated in self-development programs? If any, how much per month did you pay for it? You can think of affordable education classes for computer, Korean language, and foreign language provided by the local community center, county government, or welfare center, not including compulsory education and job training.	2008-2016

Table A1. Survey Questions about Household Consumption

Notes: Survey questions are translated by authors. Respondents were instructed to give responses in ten thousand KRW.