

# Exploring Leisure Time Activities and Sociodemographic Indicators of Subjective Happiness and Self-Perceived Health Among Filipinos

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This study explores the relationships of subjective happiness and self-perceived health with leisure time activities and sociodemographic variables among Filipinos. It uses data from the International Social Survey Programme 2007: Leisure Time and Sports (ISSP 2007), and is the first paper that specifically investigates the case of the Philippines. Ordinary least square and multinomial logistic regression analyses were conducted in this study. Age was found to have significant negative relationships with leisure time activity engagement, subjective happiness, and self-perceived health. Body Mass Index was found to significantly predict a better self-perceived health. Cultural, TV/music, and social leisure activities were found to be significant predictors only in some of the outcome categories of happiness and health, whereas physical leisure activities were not found to be significant. Notably, subjective happiness and self-perceived health were significantly predicted by subjective socio-economic status, but not by actual family income. Implications of the results are discussed in terms of the Philippines' context as a 'developing country' together with possibilities for an improved perception of quality of life among Filipinos.

**Keywords:** Leisure Activities; Philippines; Social Indicators; Subjective Happiness; Subjective Health



## INTRODUCTION

The progress and development of countries often focus primarily on the results of economic activities measured by market growth, gross domestic product (GDP), per capita income, purchasing power parity, employment, price stability, poverty incidence, and similar indicators. There has been, however, an observed disparity between the economic indicators and personal perceptions of well-being, giving rise to an increasing global trend toward the measurement of happiness or subjective well-being. Thus, rather than emphasizing purely economic growth, attention is now also directed toward the happiness of citizens, prompting various governmental agencies, international organizations, and private institutions to develop myriad ways of measuring indicators of well-being and societal progress (Boarini, Kolev, & McGregor, 2014; Domingo, 2014).

International longitudinal social surveys such as the World Values Survey (WVS) have shown that, for the past two decades, happiness had increased in

45 of the 52 countries where long-term data have been collected. The WVS observes that “since 1981 economic development, democratization, and rising social tolerance had risen to the extent to which people perceive that they have free choice, which in turn has led to higher levels of happiness around the world” (World Values Survey Association, 2016). Similar to some other developing countries, the Philippines can be considered as a case wherein the economic situation of the country and a relatively high perception of happiness by its people may be incongruent, as the country demonstrates a relatively low economic performance. Being among the bottom half of countries in the world in terms of GDP for the past two decades, the Philippines was ranked 119 out of 187 countries in the International Monetary Fund Report 2014 and 118 out of 185 countries by the World Bank in 2013 (The World Bank, 2016). Despite this rather cheerless economic situation, happiness and life satisfaction in the Philippines have been found to be relatively high in several international studies. In fact, Filipinos are considered to be among the world’s happiest citizens according to the recent Gallup Poll’s Positive Experience Index that was conducted in 143 countries, with the Philippines ranking fifth (Clifton, 2015). The Happy Planet Index (Abdallah, Michaelson, Shah, Stoll, & Marks, 2012), which measures human well-being and environmental impact, designed to challenge established indices of national development, such as GDP and the Human Development Index (HDI), ranks the Philippines among the upper quartile for all three of its reports over the recent decade. Using aggregate data from the WVS in 2005 on the question of overall happiness, the website NationMaster.com ranks the Philippines 12 out of 50. Even a decade ago, in a study of 90 countries (Veenhoven, 2004), the Philippines ranked 32 in terms of life satisfaction. As a result, the Philippines’ *National Statistical Coordination Board* (NSCB) has considered developing its own Happiness Index. It aims to take into account happiness in combination with conventional economic indicators to come up with a more appropriate measure of the progress of Filipino society. Though its guiding principle is the fact that economic progress and happiness are not synonymous, these concepts are not entirely mutually exclusive concepts (Virola, Encarnacion, & Pascasio, 2011, p. 4986). Thus, with these recent institutional developments and an emphasis on measuring the well-being of people, the study of the determinants of happiness or subjective well-being becomes ever more relevant for those working toward not only understanding, but possibly also improving the quality of life in a more integrated approach. Leisure and health are two aspects that have been considered in various studies on subjective well-being conducted in different countries (Brajša-Žganec, Merkaš, & Šverko, 2011; Hribernik & Mussap, 2010; Rossi, Ateca, Gerstenbluth, & Mussio, 2014). In Australia, for instance, it was found that leisure is a life domain that contributes significantly to subjective well-being (Hribernik & Mussap, 2010, p. 703). Results of another study conducted in Croatia show that engagement in various leisure activities significantly contributed to subjective well-being and allowed people to build social relationships, feel positive emotions, acquire additional skills and knowledge, and therefore improve their quality of life (Brajša-Žganec et al., 2011, p. 87). Numerous studies have been conducted to additionally determine what specific leisure activities are associated to subjective happiness and well-being. Yet, as Brajša-Žganec et al. (2011) note, “though varying numbers of leisure activities groupings have been identified in the literature, there is no general agreement about the classification of

leisure activities as well as which specific groups predict subjective well-being” (p. 82). Similar studies have explored determinants and structural relationships of perceived health, happiness, and Body Mass Index (BMI) together with sociodemographic variables in countries such as the Netherlands (Cornelisse-Vermaat, Antonides, Van Ophem, & Van Den Brink, 2006, p. 152), where they found that BMI was an important determinant of perceived health, which in turn increased happiness in Dutch society. In England, on the other hand, findings indicated that happiness showed a positive correlation with self-efficacy and negative relationship with BMI (Cook & Chater, 2010, pp. 61-62). Multinational studies have been conducted to define the impact of religiosity on happiness, well-being, and life satisfaction (Elliott & Hayward, 2009; Gebauer, Nehrlich, Sedikides, & Neberich, 2013; Joshanloo & Weijers, 2015), with results indicating that religiosity mitigates the negative effects of various factors toward people’s subjective happiness, especially in poorer or oppressed countries. Despite the vast literature that explores the various aspects of subjective well-being utilizing social indicators from international surveys, very few studies conduct a focused analysis on the Philippines. Studies that include the Philippines have found various significant relationships to subjective happiness such as self-esteem, satisfaction with life, measures of delight and terror, positive affect and negative affect (Swami et al., 2009). Moreover, in a study conducted in the Philippines by the NSCB among four different subpopulations, low income family members or individuals with employees of two governmental and one private agencies were compared. It was found that happiness deriving from controllable domains (internal factors) was higher than from those that are not controllable (external factors), regardless of gender or subgroup (Virola, Encarnacion, Pascasio, & Clavido, 2010). Specifically, happiness derived from domains such as community and volunteer work, cultural activities, education, family, health, income and financial security, friends, love life, sex life, leisure and sports, religion and spiritual activities, technological know-how, work, and food, is higher compared to external factors like the economy, environment, government, politics, and peace and security (Virola et al., 2010, p. 11).

For the International Social Survey Programme 2007 module on Leisure Time and Sports (ISSP 2007) multinational studies were conducted to explore the relationship between leisure time and happiness (Haller, Hadler, & Kaup, 2013; Pampel, 2012; Wang & Wong, 2014). The survey addresses leisure time related issues such as different forms of leisure time activities; the relation of leisure to work and other spheres of life; and the social determinants and consequences of leisure. For instance, survey data from 33 countries showed that family income and individual demographic variables, such as age and health condition, are associated significantly with happiness (Wang & Wong, 2014, p. 111). Up to date, no research has been conducted that utilizes the ISSP 2007 survey data to focus on the leisure activities of Filipinos and their relationships to subjective happiness and perceived general health. As the ISSP data set is relatively large and robust compared to most localized surveys conducted in the country, it is an opportunity to gain better insights into general public opinion based on a wide range of respondents in the Philippines.<sup>1</sup>

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1 Each yearly wave of ISSP surveys collects sociodemographic as well as substantive (based on citizens’ opinion) data on various topics.

This paper investigates survey data related to the subjective well-being of Filipinos in terms of self-reported happiness and health. It will explore and determine statistically significant relationships among substantive variables (e.g., attendance of religious services, self-placement on a top-bottom socio-economic scale, conception of an ideal shape of a man and a woman) that relate to leisure activities and included sociodemographic indicators (e.g., age, education, family income, or marital status). For this paper, leisure activities refer to behaviors that a person voluntarily engages in when free from work or familial responsibilities. Happiness is how respondents currently consider how happy or unhappy their life is in general. Concerning health, they are asked how healthy they felt in general. The analysis specifically addresses the following research questions:

1. What are the social structuring dimensions of leisure time activities that Filipinos engage in and what are the significant predictors of these activities?
2. What are the significant predictors of overall happiness among Filipinos?
3. What are the significant predictors of subjective general health?

Finally, the study also aims toward a better understanding of the implications of the findings, comparing them with results from relevant literature and relating them to the Filipino context and to possibilities of improving general perceptions of the quality of life.

#### DATA AND METHODS

Analyses are based on data from ISSP 2007. ISSP data sets are provided by the Zentralarchiv für Empirische Sozialforschung (The Central Archive for Empirical Social Research), University of Cologne, and can be found at the GESIS Data Archive.<sup>2</sup> The ISSP is a collaboration of social scientists developing annual cross-cultural comparable surveys in currently 53 participating nations. It is a continuing program that covers various recurring topics important for social science research and conducts surveys focused on a single topic each year. The ISSP 2007 Leisure Time and Sports module was developed between 2003 and 2006, fielded in 36 countries, and was conducted in the Philippines from March 2008 to May 2008 by the *Social Weather Stations* (SWS).<sup>3</sup> The module covers activities, attitudes, and values related to leisure and satisfaction. It measures myriad aspects of leisure that include for instance the meaning of time and leisure, its relation to work and other spheres of life, and the social determinants and consequences of leisure, together with sociodemographic variables. The sampling procedure is a stratified, multistage random sample considering region, household, and persons within the household. For the Philippine subsample the target populations were adults with age ranging from 18 to 91 years old. The sam-

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<sup>2</sup> The archive can be accessed at <http://www.gesis.org/en/institute/gesis-scientific-departments/data-archive-for-the-social-sciences/>.

<sup>3</sup> The SWS is a private non-stock, non-profit research institution in the Philippines that conducts regular public opinion surveys on various issues including politics, economics, and social issues. Most prominent, the Social Weather Indicators include quality of life, change in economy, and satisfaction with public authority figures.

ple for the survey was 1,200 with an equal number of female and male respondents. The surveys were conducted using English, Filipino, Iloko, Bicol, Hiligaynon, Waray, Cebuano, Maranao, and Chavacano languages. Independent variables for this study are individual sociodemographic characteristics together with substantive variables, and a derived BMI score based on respondents' height and weight using the standard formula, defined as the weight in kilograms divided by the square of the height in meters ( $\text{kg}/\text{m}^2$ )<sup>4</sup>. Similar to previous empirical research on happiness, health, and weight aspiration (Kelaher, Williams, & Manderson, 2001; Natvig, Albrektsen, & Qvarnström, 2003; Pampel, 2012; Schieman, Pudrovska, & Eccles, 2007), this study adopts a combination of methods established and utilized in these studies. It employs *factor analysis* of the different variables on the frequencies of engaging in various leisure activities in order to find the underlying dimensional items (Pampel, 2012). Aside from finding latent dimensions, this also allows a reduction in the number of variables used in the regression models and addresses issues of *multi-collinearity*. Explorative factor analysis via the *principal component method* available in SPSS (Field, 2009) was conducted on the Philippine subsample focusing on 12 ISSP variables categorized under "Leisure Time: Activities and Satisfaction". Questionnaire items ask respondents how often they do particular activities during their free time – time that they are not occupied with work or household duties or other activities that they are obliged to do. These were rated by respondents on a five point scale ranging from 1 (daily), 2 (several times a week), 3 (several times a month), 4 (several times a year or less often), or 5 (never). These were recoded as to represent the scores in an increasing manner – 1 being the lowest and 5 being the highest. Additional details on these variables can be found in the appendix section and the questionnaire documentation in the ISSP archive.

Factor analysis of the Philippine subsample shows three dimensions (cultural, social, and TV/music activities) with *eigenvalues* greater than one. Together, these three account for over 42% of the variance observed in the data. This study follows the criteria used in the exploratory factor analysis for determining the number of principal components to retain based on the *Kaiser criterion* or *K1 rule of eigenvalues* greater than one and the *Scree test*, where eigenvalues are plotted against the number of components. As the plot moves toward latter components there is a relatively sharp decrease in *eigenvalues* which then levels off (Field, 2009, pp. 639-641; Tabachnick & Fidell, 2006, pp. 607-675).

After determining the underlying dimensions of activities, standardized scales are constructed for the three factors (cultural, social, and TV/music), adding the item of physical activities, in a similar fashion to the procedures of Pampel (2012). These variables or dimensions are treated as continuous in the subsequent analyses. Thus, to address the first research objective, the four variables are used to examine the social structuring of leisure time activities, where each of the dimensions is used as the outcome in multiple regressions with sociodemographic variables (Pampel, 2012). Adopting similar methods employed in social sciences and medicine for studying happiness (Natvig et al., 2003) and health (Kelaher et al., 2001), *multinomial regression analyses* are used to address research objectives 2 and 3 (see Introduction).

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4 For more information on the derivation and usage of the BMI, refer to the World Health Organization ([www.who.int/bmi](http://www.who.int/bmi)).

The analyses focus on the relationships of leisure activities, other substantive and sociodemographic variables with respondents' categories for overall happiness, and general health. Categorization was obtained by recoding responses in the following manner: For the statement on subjective happiness asking respondents: "If you were to consider your life in general these days, how happy or unhappy would you say you are, on the whole...?", those who responded as "Not at All Happy" and "Not Very Happy" were recoded as 1, those who responded as "Fairly Happy" as 2, and those who responded as "Very Happy" were recoded as 3. The statement on self-assessed health asking respondents: "In general, would you say your health is...?", those who responded as having "Poor" and "Fair" were recoded as 1, those who responded as "Good" as 2, and those who responded as "Very Good" and "Excellent" were recoded as 3.

With responses for the respective items recoded into three categories, it is treated as a *polychotomous* variable with membership to either category 1, 2, or 3: It is thus possible to use multinomial logistic regression – a form of logistic regression to predict membership (Field, 2009; Tabachnick & Fidell, 2006, pp. 464-503). The analysis presents a series of comparisons between one category against a specified reference category (Field, 2009, p. 300). Estimates for the parameter can be identified compared to a base line category that was specified for this study based on relevant literature and allowing for distinctive contrast, as those who are not at all happy, or not very happy, and feel they have poor, or fair health. Multinomial regression analysis estimates the effect of predictor variables on the natural log of the odds of the outcome, and allows exploration of qualitative differences between the three outcomes (Field, 2009, pp. 308-309). Tables 3 and 4 present corresponding parameter estimates and model information for the respective analyses.

## ANALYSIS AND RESULTS

### Descriptives

In terms of overall happiness, as presented in Table 1, only 19.3% of Filipino respondents indicated that they were unhappy whereas almost half (49.5%) were fairly happy and 31.2% responded as being very happy. For self-perceived general health, 40.8% felt that they had poor or fair health, 29.4% felt that they had good health, and 29.9% said they had very good or excellent health. Thus overall, the sample descriptive statistics indicate that the majority of the Filipino respondents stated to feel happy and generally at good health. A *Spearman's correlation* was performed to determine the *bivariate* relationships between responses of being happy (fairly and very happy), feeling good health (good and excellent), and their respective BMI. Two significant relationships were found: An extremely significant correlation between being happy and feeling at good health ( $= .241, n = 1198, p < .001$ ), while a very weak but significant correlation was found between feeling good health and BMI ( $= .241, n = 1198, p < .05$ ). According to the means of the component variables of leisure time activities for Filipinos, the most popular activities were watching television, listening to music, and getting together with friends, whereas the least popular activities were spending time on the Internet/PC, attending cultural events, and playing cards or board games.

Variable	N	Mean	Std. De- viation	Min	Max
<i>Sociodemographic</i>					
Female	1200	0.50	0.50	0	1
Age (decades)	1200	3.99	1.54	1.8	9.1
Education	1200	5.21	2.28	1	10
Married	1200	0.68	0.47	0	1
Urban	1195	0.54	0.50	0	1
Employed-School	1194	0.58	0.49	0	1
Subjective Status (self-placement)	1197	4.86	1.87	1	10
Attendance of Religious Services	1196	5.17	1.52	0	7
Family Income (thousands)	1130	8.99	9.40	0.00	100.00
<i>Body weight related</i>					
BMI	985	22.19	3.95	13.85	41.62
Image of Ideal Man (slender)	1198	0.45	0.50	0	1
Image of Ideal Woman (slender)	1198	0.54	0.50	0	1
<i>Leisure Time Activities (factor ana- lyzed)</i>					
Cultural	1200	0	1	-1.59	3.85
Social	1200	0	1	-2.30	3.29
TV/Music	1200	0	1	-3.95	0.90
Physical	1200	0	1	-1.65	2.14
<i>Multinomial</i>					
		Categories			
		Not at All & Not Very Happy	Fairly Happy	Very Happy	
Overall Happiness	1198	231	593	374	
		Poor & Fair Health	Good Health	Very Good & Excellent Health	
General Health	1199	489	352	358	

Table 1. Descriptive statistics and distribution of multinomial categories.  
(author's compilation of data available from the ISSP archive).

### Factor Analysis and Ordinary Least Square Regression for Leisure Time Activities

Results from the exploratory factor analysis using the principal component method on the 12 leisure time variables revealed that, for the Philippine subsample, variation is explained by three factors: The first factor was cultural, thus composed of going to movies, shopping, spending time on the Internet, reading books, and attending

cultural events; the second factor was composed of social activities such as playing cards, getting together with friends, attending sporting events as spectators, doing handicraft or woodworking, and getting together with relatives; and the third factor was composed of listening to music and watching television. The interpretations of these factors are somewhat similar to the findings in the study made by Pampel (2012) for sedentary activities. Herein, the cultural dimension is linked to high socio-economic status (SES) activities which entail high personal expense and investment for access in comparison to other leisure activities (Pampel, 2012, p. 401). The second factor includes socializing activities such as playing cards or board games, getting together with friends, attending sporting events as spectators, doing handicrafts or woodwork, and getting together with relatives that are not living in the same household. Four of the five items clearly have a social component, for instance cards and board games which are usually played with other people during get-togethers and as pastimes during idle moments, colloquially termed in the Filipino language as *istambay* or *tambay* (from the English word “standby”), usually in public areas. As for the handicraft or woodwork activity, it may be social in terms of how it is conducted with other people or for the intended purpose of their crafted items, which may serve social functions such as sporting events, processions, or *fiestas* (town festivals), by making team uniforms, themed costumes, party favors, toys, props, streamers, or banners. The do-it-yourself aspect combined with doing it with other people may not only allow savings compared to buying finished commercial products from stores or malls, but also allows a sense of bonding, team building, and *pakikisama* (camaraderie). The last factor is composed of listening to music and watching television. After the initial outlay for audiovisual equipment, these are essentially two activities that comparably require the least amount of money and effort in order for the respondents to enjoy. Understandably, these two are the most frequent leisure time activities that Filipinos partake in.

The social structuring of leisure time activities is examined using *ordinary least square regression*, where each of the three dimensions plus taking part in physical activities was used as the outcome in multiple regressions with sociodemographic and substantive variables. As reported in Table 2, all models were found to be significant. Among predictors, age was found in three models as significantly reducing the more engaging cultural, social, and physical activities, but was not found to be significant for listening to music and watching television. Similarly, being married was also found to be negatively associated with the three aforementioned activity types, most strongly with cultural activities. Education was significant across the three models of cultural, physical, and TV/music, but not for participation time in social activities. Urban residence is associated significantly with more TV/music and physical activities, which may possibly be attributed to easier access to actual (basketball, volleyball, badminton courts) or ad hoc (street basketball, hopscotch) sporting facilities and the availability of commercial audiovisual entertainment products, or broadcasting infrastructures and public utilities such as electricity grids, compared to rural areas. Being female was only found to be negatively associated with social and physical activities, though it must be noted that these are the strongest associations (unstandardized  $b = -0.653, -0.491$  respectively) found on all four models.

Sociodemographic Predictors	Leisure Time Activities			
	Cultural	Social	TV / Music	Physical
Female	0.071 (0.054)	-0.653 (0.060)	-0.050 (0.061)	-0.491 (0.060)
Age (decades)	-0.128 (0.018)	-0.084 (0.020)	-0.027 (0.020)	-0.086 (0.020)
Education	0.154 (0.013)	0.009 (0.014)	0.081 (0.014)	0.051 (0.014)
Married	-0.206 (0.058)	-0.150 (0.063)	-0.035 (0.064)	-0.172 (0.063)
Urban	0.020 (0.054)	0.106 (0.058)	0.219 (0.060)	0.177 (0.059)
Employed-School	0.039 (0.056)	-0.077 (0.061)	-0.094 (0.062)	0.006 (0.061)
Subjective Status	0.007 (0.014)	0.009 (0.016)	0.043 (0.016)	-0.012 (0.016)
Family Income (thousands)	0.009 (0.003)	0.006 (0.003)	0.004 (0.003)	0.004 (0.003)
(constant)	-0.327 (0.134)	0.611 (0.146)	-0.568 (0.149)	0.358 (0.146)
N	1121	1121	1121	1121
R square (adj.)	0.247	0.134015	0.081504	0.126408

\*p < 0.05, \*\*p < 0.01, \*\*\*p < 0.001

Figures in each column are unstandardized coefficients and figures in parenthesis are standard errors.

Table 2. Multiple regression coefficients for predictors of leisure time activities in the Philippines. (author's compilation, with methods adapted from Pampel, 2012).

If you were to consider your life in general these days, how happy or unhappy would you say you are, on the whole?

	<i>B</i>	SE		95% Confidence Interval for Exp(B)		
				Lower Bound	Odds Ratio	Upper Bound
<i>Fairly Happy</i>						
Age (decades)	-0.244	(0.067)	***	0.687	0.784	0.894
Cultural	0.184	(0.126)		0.938	1.202	1.540
Social	-0.054	(0.116)		0.755	0.948	1.190
TV/Music	0.140	(0.100)		0.947	1.150	1.398
Physical	-0.188	(0.107)		0.672	0.829	1.022
Subjective Status	0.134	(0.055)	**	1.028	1.144	1.273
Education	0.025	(0.050)		0.930	1.026	1.132
BMI	0.052	(0.026)	*	1.001	1.053	1.108
Family Income (thousands)	-0.008	(0.011)		0.970	0.992	1.015
Attendance of Religious Services	0.158	(0.060)	**	1.041	1.171	1.316
Female (0)	-0.068	(0.219)		0.608	0.935	1.435
Married (0)	0.099	(0.214)		0.726	1.104	1.678
Employed-School (0)	-0.205	(0.206)		0.544	0.815	1.220
Urban (0)	-0.183	(0.196)		0.567	0.833	1.224
Image of Ideal Man (corpulent)	-0.155	(0.211)		0.567	0.857	1.295
Image of Ideal Woman (corpulent)	0.474	(0.216)	*	1.053	1.607	2.452
Intercept	-0.572	(0.786)				
<i>Very Happy</i>						
Age (decades)	-0.344	(0.075)	***	0.612	0.709	0.821
Cultural	0.213	(0.134)		0.951	1.238	1.610
Social	0.005	(0.124)		0.788	1.005	1.282
TV/Music	0.296	(0.111)	**	1.081	1.344	1.672
Physical	-0.179	(0.115)		0.667	0.836	1.049
Subjective Status	0.143	(0.059)	*	1.028	1.153	1.294
Education	-0.035	(0.054)		0.869	0.966	1.074
BMI	0.051	(0.028)		0.996	1.052	1.110

Family Income (thousands)	0.011	(0.011)		0.989	1.011	1.034
Attendance of Religious Services	0.190	(0.067)	**	1.061	1.209	1.378
Female (0)	-0.271	(0.236)		0.481	0.763	1.211
Married (0)	-0.212	(0.233)		0.512	0.809	1.278
Employed-School (0)	-0.028	(0.221)		0.630	0.972	1.501
Urban (0)	0.025	(0.211)		0.678	1.025	1.549
Image of Ideal Man (corpulent)	0.128	(0.226)		0.730	1.137	1.771
Image of Ideal Woman (corpulent)	0.185	(0.231)		0.765	1.203	1.891
Intercept	-0.651	(0.847)				

Model  $\chi^2 = 96.610$ ;  $p < .0001$ ,  $-2 \log \text{likelihood} = 1803.562$ , Pearson  $\chi^2 = 1848.688$ ,  $p > .2$ ; Deviance  $\chi^2 = 1803.562$ ,  $p = 1$ . Pseudo  $R^2$  (Cox and Snell = 0.099, Nagelkerke = 0.114, McFadden = 0.051). Chance accuracy: 37.87%, Model classification accuracy: 49.95%

Notes: \* $p < 0.05$ , \*\* $p < 0.01$ , \*\*\* $p < 0.001$ ;

Reference category is: Not at All Happy, Not Very Happy.

Table 3. Results of the multinomial logistic regression analysis for subjective happiness (author's compilation, with various methods adapted from Natvig et al., 2003; Kelaher et al., 2001; and Schieman et al., 2007).

### Multinomial Regression for Happiness and Health

Both multinomial logistic regression models were found as having a statistically significant overall relationship between the combination of their independent variables and dependent variable, as indicated by model *chi-square tests*, and having overall accuracy rates that are greater by 25% than the *proportional-by-chance accuracy rate*. Two measures of  $R^2$  (*Cox and Snell's measure* and *Nagelkerke's adjusted value*) for each model are reported in their respective tables (Table 3 and Table 4), indicating fairly decent effect.

Table 3 presents results from the multinomial logistic regression model for subjective overall happiness of Filipinos. With those who reported being unhappy (not at all happy and not very happy) as the reference category, findings reveal that age had moderate negative associations on the odds of being happy – thus the older the respondents are, the less happy they felt. On the other hand, subjective status and attendance to religious activities were found to have almost similar positive associations on the odds of being happy.

## In general, would you say your health is ...?

	B	SE		95% Confidence Interval for Exp(B)		
				Lower Bound	Odds Ratio	Upper Bound
<i>Good</i>						
Age (decades)	-0.143	(0.061)	*	0.769	0.867	0.977
Cultural	0.021	(0.107)		0.829	1.022	1.260
Social	0.111	(0.102)		0.915	1.117	1.363
TV/Music	0.045	(0.089)		0.878	1.046	1.245
Physical	-0.037	(0.096)		0.798	0.963	1.163
Subjective Status	0.057	(0.048)		0.963	1.059	1.164
Education	0.074	(0.044)		0.989	1.077	1.173
BMI	0.041	(0.023)		0.997	1.042	1.089
Family Income (thousands)	-0.003	(0.009)		0.979	0.997	1.015
Attendance of Religious Services	-0.027	(0.056)		0.873	0.974	1.086
Female (0)	0.131	(0.190)		0.786	1.140	1.655
Married (0)	-0.027	(0.186)		0.676	0.973	1.402
Employed-School (0)	0.355	(0.181)	*	1.000	1.426	2.034
Urban (0)	0.082	(0.172)		0.774	1.085	1.520
Image of Ideal Man (corpulent)	0.010	(0.187)		0.700	1.010	1.456
Image of Ideal Woman (corpulent)	0.144	(0.187)		0.800	1.155	1.667
Intercept	-1.437	(0.704)	*			
<i>Very good, Excellent</i>						
Age (decades)	-0.312	(0.067)	***	0.642	0.732	0.835
Cultural	0.177	(0.107)		0.968	1.194	1.471
Social	0.216	(0.102)	*	1.017	1.241	1.515
TV/Music	0.183	(0.097)		0.993	1.201	1.452
Physical	-0.011	(0.097)		0.819	0.989	1.195
Subjective Status	0.112	(0.049)	*	1.015	1.118	1.232
Education	0.046	(0.044)		0.960	1.047	1.143
BMI	0.080	(0.022)	***	1.037	1.083	1.131

Family Income (thousands)	-0.009	(0.010)		0.972	0.991	1.011
Attendance of Religious Services	-0.044	(0.058)		0.854	0.956	1.071
Female (0)	-0.207	(0.195)		0.555	0.813	1.190
Married (0)	-0.440	(0.196)	*	0.439	0.644	0.946
Employed-School (0)	0.126	(0.187)		0.787	1.134	1.635
Urban (0)	0.044	(0.175)		0.741	1.045	1.473
Image of Ideal Man (corpulent)	0.119	(0.189)		0.778	1.126	1.631
Image of Ideal Woman (corpulent)	-0.139	(0.191)		0.599	0.870	1.265
Intercept	-1.169	(0.709)				

Model  $\chi^2 = 95.931$ ;  $p < .0001$ ,  $-2 \log \text{likelihood} = 1917.303$ , Pearson  $\chi^2 = 1861.275$ ,  $p > .2$ ; Deviance  $\chi^2 = 1917.303$ ,  $p = 1$ . Pseudo  $R^2$  (Cox and Snell = 0.099, Nagelkerke = 0.111, McFadden = 0.048). Chance accuracy: 33.96%, Model classification accuracy: 45.78%

Notes: \* $p < 0.05$ , \*\* $p < 0.01$ , \*\*\* $p < 0.001$ ;

Reference category is: Poor, Fair.

Table 4. Results of the multinomial logistic regression analysis for subjective health (author's compilation, with various methods adapted from Natvig et al., 2003; Kelaher et al., 2001; and Schieman et al., 2007).

Interestingly, BMI had positive associations with being fairly happy, and respondents who had conceptions of the ideal shape of a woman being corpulent were more likely to report feeling fairly happy ( $b = 0.474$ ,  $p < 0.05$ ). Hence, the odds of being fairly happy compared to being unhappy are less for people who have a slender conception for the ideal shape of a woman. Cultural, social, and physical leisure time activities did not significantly predict whether respondents reported being fairly happy or being unhappy, and also did not significantly predict whether respondents reported being very happy or being unhappy. Only leisure time activities of listening to music and watching television significantly predicted whether Filipino respondents reported being very happy or being unhappy ( $b = 0.296$ ,  $p < .01$ ). Thus, compared with those who felt unhappy, the more that respondents listened to music and watched television, the more likely they would feel very happy. Table 4 shows the results from the multinomial logistic regression model for self-assessed general health of Filipino respondents. With those who say that their health is poor and say that their health is fair being the reference category, findings suggest that age had moderate negative associations on the odds of feeling at good and at very good/excellent health. Thus, the older the respondents were, the less healthy they felt.

Whether the respondents were unemployed or did not study at that time significantly predicted whether they reported as feeling at good health or feeling at poor/fair health ( $b = 0.355$ ,  $p < .05$ ). In other words, those who were employed or studied were less likely to feel at good health. Subjective status and BMI had moderate positive associations on the odds of respondents having feelings of a very good/excellent health. Whether the respondent was unmarried significantly predicted whether they reported as feeling at very good/excellent health or feeling at poor/fair health ( $b = -0.440$ ,  $p < .05$ ). Those who were married were more likely to feel at very good/excellent health. For self-assessed general health, cultural, physical, and TV/Music leisure time activities did not significantly predict whether respondents reported feeling at good health or feeling at poor/fair health. These also did not significantly predict whether respondents reported feeling at very good/excellent health or feeling at poor/fair health. Interestingly, only social activities significantly predicted whether Filipino respondents reported feeling at good health or feeling at poor/fair health ( $b = 0.216$ ,  $p < .05$ ). Thus, compared with those who felt at poor and fair general health, the more that respondents engaged in social leisure activities, the more likely they would feel at very good/excellent health.

## DISCUSSION

### Social Structuring Dimensions and Predictors of Filipino Leisure Time Activities

As exploratory factor analysis on the 12 leisure time variables revealed, variation is explained by three factors: the first factor being cultural, the second factor being social activities, and the third and final factor being passive activities such as listening to music and watching television. The structuring is comparable to the findings of Pampel (2012), with the exception of handicraft or woodwork activities being included in the social activities factor rather than representing a separate factor. Physical activities figured as a separate variable. Among predictors, being female was only found to be significantly negatively associated with social and physical activities. However, it must be noted that these are the strongest associations found on all four models. For physical activities, a possible explanation may be that, in the more conservative areas of the country, women may be expected to be less engaging in physically intensive outdoor leisure activities as opposed to men. Therefore, Filipino women tend not to engage in rough, boisterous, or sweat-inducing play in the humid tropical climate. The social aspect may be more complex to infer upon, though it can be assumed that safety concerns lie at the root of such results, considering that leisure time usually becomes available in the late hours after school or work. Unfortunately, nighttime in the Philippines is associated with high incidence of robbery, assault, and rape (Cabida & Zenit, 1995). Age was found to be negatively associated with engaging in cultural, social, and physical activities, but was not found to be significant for listening to music and watching television. Similarly, being married was also found to be negatively associated with social, physical, and cultural activity types. As for other independent, sociodemographic variables, education was significant for participating in cultural, physical, and TV/music but not for social activities. Urban residence is associated significantly with participation in more TV/music and physical activities.

### **Significant Predictors of Overall Happiness Among Filipinos**

The relationship of age with happiness, along with leisure activity engagement, was found to be negative, thus similar to the findings of a study conducted in Croatia by Brajša-Žganec et al. (2011, pp. 85-88). Moreover, comparing the results of this study to observations in 33 countries, including the Philippines, deriving from the ISSP data set (Wang & Wong, 2014) and a study conducted in the Philippines by the NSCB (Virola et al., 2011, pp. 4988-4990), increased subjective happiness of being fairly happy and very happy, as opposed to not being happy, was found to be significantly predicted by subjective economic status. This shows that indeed happiness and economic progress are not entirely mutually exclusive concepts. Distinctive for this study's results is that progress related to happiness was found to be based on the subjective socio-economic positioning of a person rather than dependency on the income of the family. This goes well with observations that indicate that relative income may actually matter more than absolute income. As the findings of Luttmer (2004, p. 29) show, individuals' self-reported happiness is negatively affected by the earnings of others in their area. Increased earnings of neighbors reduce one's satisfaction with material aspects of life and have the strongest negative effect on happiness for those who socialize more in their neighborhood (Luttmer, 2004, p. 29). Moreover, subjective status and attendance to religious activities were found to have almost similar positive associations on the odds of being happy, which was more consistently significant in comparison to leisure activities where only radio and TV activities were found to be significant.

### **Significant Predictors of Subjective General Health**

Subjective general health of feeling good/excellent was also found to be significantly predicted by subjective economic status. Among leisure activities, engagement in social activities made respondents feel healthier. This result is different from the findings obtained in a study conducted on elderly Singaporean respondents where poor self-assessed health was predicted by participation in chit-chat, visiting friends, and socializing (Chan & Jatrana, 2007, p. 480). Finally, it was found that married people were more likely to feel very good/excellent health. This is comparable to the results found in the Netherlands wherein being married or cohabiting had a strong positive effect on perceived health, and living together might even smooth one's social life and regulate meal times (Cornelisse-Vermaat et al., 2006, pp. 151-153). An inference that can be made on these results may be related to the lessening of stress due to the benefits that socialization and cohabiting provides, particularly in terms of child-care and child-rearing support, as well as to the alleviation of loneliness on the part of the elderly, especially in a developing country like the Philippines where extended family structures still prevail.

### **Implications of Findings**

Overall, older people were significantly found to engage less in leisure activities, feel less happy, and less healthy. Moreover, happiness seems to be more significantly re-

lated to passive categories of leisure activity which participants derive entertainment from. This might be related to the relatively high commitment and active engagement in livelihood activities: It is not uncommon for Filipinos with full-time employment and even children to use what remaining free time they have for extra income activities, engaging in a second job, or entrepreneurship, colloquially termed as 'side-line' or 'racket', in order to make ends meet and help their families (Brizuela, 2014; Hutchinson, 2012). This can be seen in contrast to richer countries, where people may engage less in manually intensive labor, having more free time (sometimes mandatory), and getting bigger savings that would allow them to work less hours and have better access to expensive and diverse forms of leisure and recreational activities (Boarini et al., 2014; Gandelman, Piani, & Ferre, 2012; Haller et al., 2013; Rossi et al., 2014). Future studies can thus explore – given particular religious, cultural, and socio-economic characteristics such as those found in the Philippines subsample – whether certain leisure patterns and happiness indicators hold true among certain groups in both wealthy and developing countries. For instance, as noted in the multinational study by Haller et al. (2013), which also uses the ISSP leisure module data from 36 countries, time stress is understood as a subjective experience or anxiety which arises in situations of burden, often connected with the feeling that it will be difficult to cope with a certain task in a given time. Supposedly, for developing countries wherein individuals have low incomes and may also have different or fewer expectations, people live in time affluence (Haller et al., 2013, p. 404). Yet surprisingly, they observed that the Philippines stood out by having very high levels of time stress (Haller et al., 2013, p. 416). Other studies also found different significant relationships in comparison to this study, for instance, the relationship between BMI and happiness, which was found negative (Cook & Chater, 2010) – even with Filipino subsamples included in multiethnic populations (Pinhey, Rubinstein, & Colfax, 1997) – while this study finds it positive. In such cases, socio-cultural factors may yield clues when investigating different ethnic groups or members of different ethnic communities in a country.

Among the most interesting facets that this research uncovered is how happiness and even self-perceived health were significantly predicted by subjective socio-economic status, but not by actual family income. This suggests that for those who aspire to make citizens happier in developing countries it might be more rewarding to address the subjective perceptions of socio-economic position rather than the real socio-economic conditions. Conversely, for those who have low perceptions of subjective socio-economic status, as indicated by the significant relationships found in religious attendance and the TV/music leisure activity toward happiness, a similar approach toward contentment may be pursued. As religious attendance has a similar positive relationship compared to that of subjective socio-economic status, similar effect toward increasing happiness could be accomplished by religious leaders extolling virtues of contentment and serenity despite poverty and injustice during service. The results of this study also seem to reinforce some intuitive cultural conceptions in developing countries that warrant further exploration for anthropologists and geographers, such as the sociological aspects of happiness and forgiveness relevant to development and human rights issues. In their research in 11 countries, Gebauer et al. (2013) found that religiosity buffers the adverse consequences of poverty, wherein re-

ligious people in religious cultures reported higher well-being when their income was low compared to when it was high. This is similar to the analyses made by Joshanloo and Weijers (2015, p. 610):

Belief in religion helps to deal with the negative emotional impacts of injustice at the national level, likely due to religious believers perceiving at least some injustice as a necessary part of some complicated higher plan for the greater good, rather than as a reason to be angry at, or lose faith in, God.

### **Limitations of the Study**

The study focused on finding significant predictors and associations for leisure time activities, overall happiness, and subjective happiness, placing the results within the Philippine context. It aimed toward exploration rather than validating the causality of the relationships, particularly due to the cross-sectional nature of the study. The nature of the ISSP data also limits investigation to socio-cultural aspects rather than the physiological traits or medical conditions of respondents. On the offset, due to the limits of the survey data, the aim was not the creation of absolute predictive models nor was it arguing for cultural relativism. Though a function of the regression models is prediction, the main objectives of the study were to see if there are reliable relationships and to interpret the results within the context in which the research is being conducted. As such, it does not attempt to offer extensive cultural explanations or inference that are beyond the scope of the research questions yet may still be pursued in future studies based on the results found in this explorative study.

As with most survey data, there is always the possible limitation of self-reports wherein certain attributes and behaviors may be under or over reported. Due to the subjective nature of the variables analyzed, it may also be open to criticism in terms of the methodological approach, as well as the validity and reliability of subjective data (Gandelman et al., 2012). Because the survey was conducted by the Social Weather Stations and is in line with the standards and procedures of the ISSP, the author does not have the capacity to test the reliabilities of scales, validation checks, and explore other possible aspects that may limit self-reports such as social desirability, positive illusions, or the effects of present mood (Swami et al., 2009). In terms of overall design, a limitation acknowledged is that the study follows established relationships described in literature and prescribed models in relation to the available data. Thus for future research, there may still be possibilities to explore omitted variables. Though such variables have yet to be tackled in current literature, the next round of ISSP Leisure Time and Sports module that will be available in a few years may open opportunities for broader models to discern significant results from the additional sample data it provides.



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