

Determinants of Life Satisfaction Among Elderly Filipinos: A Mixed-Method Analysis

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ABSTRACT

This paper aims to identify the determinants of life satisfaction among older Filipino people. It uses a mixed-method approach, combining quantitative and qualitative analyses in an embedded design. Using data from the 2007 Philippine Study on Aging (PSOA), the study used bivariate analysis and binomial logistic regression analysis to show the significance of the following in achieving life satisfaction—sex, education, marital status, self-assessed health status, chewing ability, depression symptoms, difficulty in performing activities in daily living, bodily pain, emotional support, and adequacy of household income in meeting household expenses. An in-depth interview of six purposively sampled older Filipino people also reveals how life satisfaction is affected by personal circumstances, and socio-cultural and economic contexts.

Keywords: life satisfaction, older Filipinos, aging in the Philippines

Introduction

Life satisfaction is a cognitive appraisal process in which individuals subjectively analyze quality of life based on their own unique set of criteria (Miller 2011, 888). As used in this study, the survey instruments and the data from the Philippine Study of Aging (PSOA) in 2007 define life satisfaction as: “the state of being satisfied with one’s own life, after an assessment of the general acceptability of, and positive feelings for, one’s circumstances.” The assessment involves considering the different life aspects deemed significant by an individual, the net effect on one’s life quality, and the corresponding feeling it entails.

Analyzing and adapting the data from the Philippine Study of Aging (PSOA 2007) and complementing them with interviews, this paper identifies the extent to which factors—such as sex, education, marital status, self-assessed health status, chewing ability, depression symptoms, difficulty in performing activities in daily living, bodily pain, emotional support, and adequacy of household income in meeting household expenses—determine life satisfaction among elderly Filipinos.¹

Factors that Affect Life Satisfaction

Life satisfaction can be influenced by health, social engagement, economic condition, and demographic variables. For Celik et al. (2018, 406–9) who studied older adults in Turkey aged over 65 years old, these characteristics include level of education, being a green card holder, self-reported health status, physical functionality, chewing ability, household functionality, feeling depressed, and feeling withdrawn. On the other hand, sociocultural, political, and economic milieus can also be important in achieving life satisfaction (Ngoo, Tey, and Tan 2015, 141, 144, 146,152).²

People’s physiological, social, and economic conditions change as they age (Ogena 2019, 129). Thus, life satisfaction may be influenced by other factors relevant only later. Indeed, the progression of age, especially in Eastern Europe, Middle East, and North Africa, may lower life satisfaction (Bonini

2008, 230, 235), probably due to the increasing challenges facing older people. In Eastern Europe, South Asia (Bonini 2008, 230, 235), and Southeast Asia (Devasahayam 2014, 3-4), lower levels of education may also have a negative effect due to the accompanying social and economic disadvantages that lower the standard of living. Meanwhile, higher levels of education in East Asia, South Asia, Southeast Asia (Ngoo, Tey, and Tan 2015, 150, 154) and Turkey (Celik et al. 2018, 409) may improve social and economic opportunities, thereby improving income, standard of living, and life satisfaction.

In terms of gender, females in Southeast Asia (Devasahayam 2014, 3-4) may have lower satisfaction because of disadvantageous treatment and lack of educational and work opportunities but may have higher satisfaction when they are able to forge stronger social ties and receive more social support because of their social roles. By contrast, males especially in the Middle East, North Africa, and Sub-Saharan Africa (Bonini 2008, 235) tend to have lower satisfaction; while males in Central and West Asia (Ngoo, Tey, and Tan 2015, 152) tend to have higher satisfaction than females due to the persistent and pronounced gender inequality in these regions.

In terms of marital status, being unmarried, divorced, or widowed may have greater negative impact on the life satisfaction of males, who tend to have fewer social ties and support due to less engagement in social roles (Devasahayam 2014, 4; Liu, Li, and Feldman 2013, 930). Regardless of gender, in South Asia, Central Asia, and West Asia (Ngoo, Tey, and Tan 2015, 151-52), those who were widowed, separated, or divorced also had lower life satisfaction.

Health status, particularly of physical, mental, and dental health, may also have significant effects among older people. Specifically, lower self-reported health status, loneliness, depression, and lower ability to perform activities in daily living result in difficulties among older people, which tend to decrease life satisfaction (Celik et al. 2018, 392). Much of the same holds true in Norway, where people with health disadvantages and lack of social participation and integration have higher risk of loneliness, which was associated with lower levels of life satisfaction (Brunes, Hansen, and

Heir 2019, 1, 5). On the other hand, better physical functionality—which means the absence of difficulty in performing daily activities, and better chewing ability or dental health—tend to increase satisfaction (Celik et al. 2018, 408). In Taiwan, those who participate in social activities, especially leisurely ones, tend to be more satisfied (Ku et al. 2014, 705–6).

Economic conditions also play a role. Among the elderly in Turkey (Celik et al. 2018, 402–3) and in Rio de Janeiro, Brazil (Ribeiro et al. 2018, 2689), employment and higher levels of income may lead to higher life satisfaction because of their positive effect on the standard of living. However, this may be affected by the type of work undertaken. In Sweden (Alden and Hammerstedt 2017, 16–8, 25–6), self-employment rather than wage-employment was usually associated with higher life satisfaction since it is compatible with older people's health conditions and need for flexible working hours. Other studies find that assets with high levels of liquidity were considered important as they can be used for emergency or immediate consumption expenditures, as in the case of older adults in Singapore (Hong and Han 2014, 137).

The Elderly in the Philippines

A total of 1,128,700 (14.4 percent) older Filipino people were deemed poor in 2015, though the number decreased to 829,200 (9.1 percent) in 2018 (PSA 2020). Compounding this is a high young dependency ratio, where a large percentage of the population below age 15 are dependent on the working age population—ages 15–64 (Badana and Andel 2018). In 2007, the child dependency ratio or the ratio of people aged under 15 to those aged 15–64 years was pegged at 58.74. This ratio decreased to 50.22 in 2015 (PSA 2018), but is still considerably high (Todaro and Smith 2003, 66).

This young dependency ratio since the 1960s (IndexMundi 2019) implies an economic burden for older Filipinos. They cannot save for retirement while they are still working because they must support their younger dependents (Badana and Andel 2018). While some may receive a monthly pension, the amount may not always be sufficient to meet their

living expenses (Duaqui 2013; World Bank Group 2017; Help Age Global Network 2017). In relation to this, with substantial decreases in per capita labor income among older persons because of retirement, coupled with substantial increases in health spending, their lifestyle deficit, wherein consumption expenses exceed labor income, has been increasing since the 1990s (Abrigo et al. 2018, 15–17).

Despite this high dependency ratio, older persons' outlook and satisfaction with life may be enhanced by the respect and care from other family members, who practice filial piety (Badana and Andel 2018, 215). Also, close family ties mean pooling or sharing resources to meet household needs or expenses.

So far, there is dearth of information on a comprehensive list of factors affecting life satisfaction of older people in the Philippines. Majority of the research tends to focus on perceptions of aging, quality of life, and participation in the workforce (Badana and Andel 2018, 213). Other studies (Brittiller et al. 2013; Laurola 2017) cover a limited range of factors. This paper seeks to fill this gap and make a modest addition to the literature.

Defining Life Satisfaction

Taking off from the aforementioned literature, including the PSOA 2007, the following were deemed as possible significant determinants of older Filipino people's life satisfaction.

1. Health variables such as self-assessed health status, dental health (indicated by chewing ability), physical health (indicated by bodily pains and ability to perform activities in daily living), and mental health (indicated by depression symptoms);
2. Social engagement variables such as amount of emotional support, membership in religious or non-religious organization, and engagement in volunteer work in church or community; and

3. Economic condition variables such as work status, wealth index (quintile), and adequacy of household income in meeting household expenses.

Due to their direct and indirect effects on other variables, demographic characteristics such as age, sex, and marital status, and, a socioeconomic characteristic, educational attainment, were the control variables (Cruz et al. 2016). Figure 1 explains the framework further. The nature of PSOA data is also discussed below, including how it was adapted for statistical analysis.

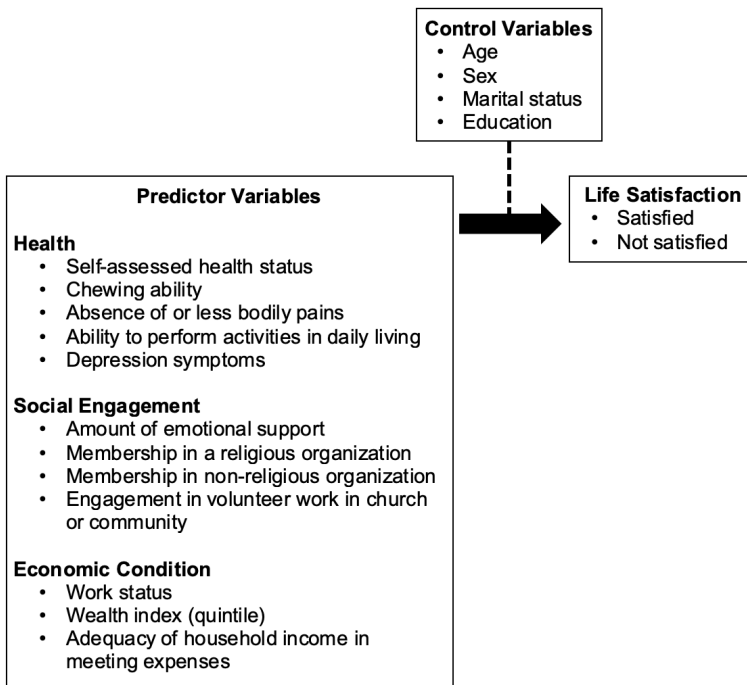


Figure 1: Conceptual framework to identify the determinants of life satisfaction of older Filipino people (Celik et al. 2018; UPPI and NUPRI 2007).³

Physical, dental, and mental health variables may affect life satisfaction. Specifically, low self-assessed health status, difficulty in chewing food, bodily pains, difficulty in performing activities in daily living (e.g., feeding, toileting, dressing and undressing, getting in and out of bed or chair, showering or bathing), and feeling depression symptoms may hinder an older person's personal care and social participation and integration. In turn, this may lead to isolation, loneliness, and thus, lower life satisfaction.

Social engagement variables like amount of emotional support, membership in religious and non-religious organizations, and volunteerism may also affect life satisfaction. Higher emotional support may indicate stronger social ties which increase satisfaction, while memberships in organizations and volunteerism provide a sense of fulfillment and usually involve social physical activities that can be a form of leisure. On the other hand, non-membership in organizations and non-volunteerism can be viewed as a form of social withdrawal that may decrease satisfaction.

Economically, having income-generating work, wealth, and adequate household income may increase life satisfaction due to meeting needs and higher standard of living. The adequacy of household income may also protect an older person from stress or psychological discomfort.

Methods

The 2007 Philippine Study on Aging

This study utilized the data from the survey for the 2007 Philippine Study on Aging (PSOA), implemented by the University of the Philippines Population Institute (UPPI) in collaboration with the Nihon University Population Research Institute (NUPRI). According to Cruz et al. (2016, xiii), the survey was “designed to serve as the first wave of a panel study on aging,” which focuses on the “health status and well-being” of older Filipinos and “its possible correlates and determinants.” It was made “comparative with the Nihon University Japanese Longitudinal Study of Aging and the Singaporean Longitudinal Study of Aging through the use

of a common survey instrument,” which was administered to 3,105 older Filipino people aged at least 60 years old. The PSOA is also considered a “nationally representative” survey of older people (Cruz et al. 2016, xiii).

As the PSOA respondents were simply asked whether they are very satisfied, somewhat satisfied, or not satisfied with their present life, life satisfaction was a measure of overall satisfaction with life. It was the extent to which the respondents were pleased with their life, after considering a variety of factors significant to themselves. The PSOA data showed that about 11.27 percent of the 3,105 older persons surveyed were dissatisfied with their present life. Given the 2007 household population of older persons numbering 5,498,848 (Philippine Statistics Authority 2010), the actual number of dissatisfied older persons may be estimated at about 619,720. Assuming the same proportion of 11.27 percent for 2015, the number may have increased to about 849,116 as the household population of older persons grew to 7,534,306 that year (PSA 2017).

Although the survey did not elicit reasons for the responses, the factors most significant can be determined statistically from the wide range of information from the PSOA which describe or reflect the respondents’ attributes, conditions, experiences, and circumstances. If analyzed in relation to the socio-cultural and economic context of aging in the Philippines, these factors can help advance the understanding of how personal circumstances can be linked to, and influenced by, society’s circumstances (Mills 1959, 5, 15). More importantly, it helps create a nuanced understanding of aging in the Philippines, so that more interventions to improve elderly welfare—here or elsewhere—can be crafted. Since this study has an arguably comprehensive, albeit statistical, analysis on life satisfaction, it points to the need for holistic policies that consider not only one or a few factors but the entire gamut of them.

Building on the PSOA 2007: Statistical Analysis

The PSOA survey used a multi-stage sampling design,⁴ which covered 78 barangays in seven sample areas. It has a wide range of independent variables pertaining to the respondents' characteristics and circumstances that may affect health. These include "basic attributes and family make-up; children, grandchildren, and exchanges of support; health status; physical ability and disability; mental health; health utilization; tasks and activities; income and assets; attitudes and beliefs; services for the elderly; and vignettes" (Cruz et al. 2016, 20–2).

Although much of these data were used, the hypothesized relationships between the variables concerning life satisfaction were based on Celik et al. (2018) and other studies on life satisfaction in the review of literature section. The PSOA study focused on health status and on health transitions as the main and second main dependent variable respectively. By contrast, this study focuses on life satisfaction as the main dependent variable.

To identify the significant determinants of life satisfaction among older Filipino people, a mixed-methods approach was used. It triangulated and corroborated findings from multiple sources of data. Further, it provided an illustration of the influencing factors and the context in which life satisfaction may be influenced (DeCuir-Gunby and Schutz 2018).

Since this study focused on level of life satisfaction as the dependent variable, only the PSOA data pertaining to characteristics and circumstances that may affect life satisfaction were used. Choosing these attributes and correlating them with the factors influencing life satisfaction was guided by the review of literature (see Figure 1 and Table 1). Physical and dental health characteristics were taken from the PSOA health status dataset; the ability to perform daily activities, from the physical ability and disability dataset; emotional and other experiences and extent of life satisfaction, from the mental health dataset; membership in organizations, from the tasks and activities dataset; and perception of adequacy of household income in meeting household expenses, from the income and assets dataset.

As Table 1 shows, the selected characteristics and circumstances were grouped into four categories to facilitate the statistical analysis:

- Control variables, which consist of sociodemographic characteristics;
- Health variables, which pertain to characteristics indicating health conditions;
- Social engagement variables, which pertain to characteristics and circumstances indicating the degree of participation in a community; and
- Economic condition variables, which pertain to characteristics and circumstances indicating resource endowments.

In determining the PSOA respondents who may and may not be depressed, a short 12-item version of the 20-item Center for Epidemiologic Studies-Depression Scale (CES-D scale) was also used. However, this scale only screen for depression by measuring its symptoms (Cruz et al. 2016, 64).⁵

Statistical analysis involved cross-tabulation. Using the SPSS Statistics software, the number of categories within some variables was reduced by merging categories.⁶ A chi-square test of independence was then conducted. For triangulation, binary logistic regression analysis, which also involved merging some categories, was done.⁷ Details on these are found in the respective sections. Further explanations are provided in the relevant endnotes.

Table 1: Description and value of variables

Variable	Explanatory Notes
Dependent Variable:	
Life satisfaction	Satisfied*, Not satisfied Not Satisfied: 1 if not satisfied with present life, 0 if otherwise
Control Variables:	
Age	60-69 years, * 70-79 years, at least 80 years 60-69 years: 1 if age is 60-69 years, 0 if otherwise 70-79 years: 1 if age is 70-79 years, 0 if otherwise At least 80 years: 1 if age is at least 80 years, 0 if otherwise
Sex	Male, Female* Male: 1 if sex is male, 0 if otherwise
Education	None/pre-school, Elementary, High school, College+* None/pre-school: 1 if with no formal schooling or with a pre-school education at most, 0 if otherwise Elementary: 1 if with an elementary education at most, 0 if otherwise High school: 1 if with a high school education at most, 0 if otherwise College or over: 1 if with a college education or more, 0 if otherwise
Marital status	Never married, Currently married/live-in, Widowed/Separated* Never married: 1 if never married, 0 if otherwise Currently married/live-in: 1 if currently married or in consensual union, 0 if otherwise Widowed/separated: 1 if widowed or separated, 0 if otherwise
Predictor Health Variables:	
Self-Assessed Health Status	Very healthy, Of average health, Unhealthy* Very healthy: 1 if very healthy, 0 if otherwise Of average health: 1 if of average health, 0 if otherwise Unhealthy: 1 if unhealthy, 0 if otherwise
Chewing Ability	Poor, Good, Very good, Excellent* Poor: 1 if can chew soft foods at most, 0 if otherwise Good: 1 if can chew hard foods at most, 0 if otherwise Very good: 1 if can chew harder foods at most, 0 if otherwise Excellent: 1 if can chew hardest foods at most, 0 if otherwise
Bodily Pain	None, Mild, Moderate, Severe/extreme* None: 1 if without pain in the last 30 days, 0 if otherwise Mild: 1 if with mild pain in the last 30 days, 0 if otherwise Moderate: 1 if with moderate pain in the last 30 days, 0 if otherwise Severe/extreme: 1 if with severe or extreme bodily pain in the last 30 days, 0 if otherwise

*the reference category

Table 1: (continued)

Variable	Explanatory Notes
Difficulty in activities in daily living (ADL) ⁸	Without ADL difficulty, With ADL difficulty* Without ADL difficulty: 1 if without difficulty in all activities in daily living, 0 if otherwise With ADL difficulty: 1 if with difficulty in at least one activity in daily living, 0 if otherwise
Depression Symptoms ⁹	Without depression symptoms, With depression symptoms* Without depression symptoms: 1 if with a score of less than 19 in the 12-item CES-D scale, 0 if otherwise With depression symptoms: 1 if with a score of at least 19 in the 12-item CES-D scale, 0 if otherwise

Predictor Social Engagement Variables:

Amount of Emotional Support	A great deal,* Quite a bit, Not much or not at all, Keep to myself A great deal: 1 if a great deal, 0 if otherwise Quite a bit: 1 if quite a bit, 0 if otherwise Not much or not at all: 1 if not much or not at all, 0 if otherwise Keep to myself: 1 if worries or problems are kept to oneself, 0 if otherwise
Membership in a Religious Organization	Member, Not a member* Member: 1 if a member, 0 if otherwise
Membership in a Non-Religious Organization	Member, Not a member* Member: 1 if a member, 0 if otherwise
Engagement in Volunteer Work	Volunteer, Not a volunteer* Volunteer: 1 if a volunteer, 0 if otherwise

Predictor Economic Condition Variables:

Work status	Working, Stopped working completely, Not working* Working: 1 if currently working, 0 if otherwise Stopped working completely: 1 if stopped working completely, 0 if otherwise Not working: 1 if not working but looking for work or never worked and not looking for work, 0 if otherwise
Wealth index (quintile)	Poorest = 1, Second = 2, Middle = 3, Fourth = 4, Wealthiest = 5

*the reference category

Table 1: (continued)

Variable	Explanatory Notes
Adequacy of household income ¹⁰	More than enough, Just enough, Somewhat inadequate, Very inadequate* More than enough: 1 if household income is enough to pay household expenses with money left over, 0 if otherwise Just enough: 1 if household income is just enough to pay household expenses with no difficulty, 0 if otherwise Somewhat inadequate: 1 if amount of household income entails some difficulty in meeting household expenses, 0 if otherwise Very inadequate: 1 if amount of household income entails considerable difficulty in meeting household expenses, 0 if otherwise

*the reference category

Table 2: Frequency distribution and proportion of respondents by variables

Variable	Category	n (N=3,105)	%
Dependent variable			
Life satisfaction	Very satisfied	1,018	32.8
	Somewhat satisfied	1,599	51.5
	Not satisfied	350	11.3
Control variables			
Age	60 – 69	1,886	60.7
	70 – 79	872	28.1
	80 or over	346	11.1
Sex	Female	1,817	58.5
	Male	1,288	41.5
Education	None/pre-school	206	6.6
	Elementary	1,886	60.7
	High school	692	22.3
	College or over	321	10.3
Marital status	Never married	148	4.8
	Currently married/live-in	1,775	57.2
	Widowed/separated	1,182	38.1

Table 2: (continued)

Variable	Category	n (N=3,105)	%
Predictor Health Variables			
Self-Assessed Health Status	Very healthy	665	21.4
	Of average health	1,468	47.3
	Unhealthy	961	30.9
Chewing Ability	Poor	834	26.9
	Good	605	19.5
	Very good	320	10.3
Bodily pain	Excellent	1,346	43.3
	None	1,086	35.0
	Mild	1,068	34.4
	Moderate	698	22.5
Difficulty in activities in daily living (ADL)	Severe/Extreme	252	8.1
	Without ADL difficulty	2,631	84.7
	With ADL difficulty	474	15.3
Depression symptoms	Without depression symptoms	1,789	57.6
	With depression symptoms	1,129	36.4
Predictor Social Engagement Variables			
Amount of emotional support	A great deal	1,098	35.4
	Quite a bit	1,024	33.0
	Not much or not at all	439	14.1
	Keep to myself	351	11.3
Membership in a religious organization	Member	586	18.9
	Not a member	2,512	80.9
Membership in a non-religious organization	Member	712	22.9
	Not a member	2,393	77.1
Engagement in volunteer work	Volunteer	652	21.0
	Not a volunteer	2,422	78.0
Predictor Economic Condition Variables			
Work status	Working	1,209	38.9
	Stopped working completely	1,653	53.2
	Not working	241	7.8

Table 2: (continued)

Variable	Category	n (N=3,105)	%
Wealth index (quintile)	Poorest	565	18.2
	Second	598	19.3
	Middle	515	16.6
	Fourth	484	15.6
	Wealthiest	499	16.1
Adequacy of household income	More than enough	217	7.0
	Just enough	1,221	39.3
	Somewhat inadequate	1,019	32.8
	Very inadequate	617	19.9

Frequency Distribution and Proportion of Respondents by Variables

Table 2 was prepared by generating frequencies under descriptive statistics of SPSS. The categories were from the PSOA 2007 data processed by recoding, computing, and value labeling.

A great majority of PSOA's 3,105 respondents were 60–69 years old (60.7 percent), female (58.5 percent), had elementary education at most (60.7 percent), or either currently married or in a consensual union (57.2 percent). The distribution of respondents by category per variable show that 11.3 percent were dissatisfied with their present life.

In terms of health, some were unhealthy (30.9 percent), with poor chewing ability (26.9 percent), or experiencing moderate to severe/extreme pain (30.6 percent). Few were having difficulty in at least one activity in daily living (15.3 percent), but many were categorized as having symptoms of depression (36.4 percent).

Socially, most were not active in or not a member of a religious organization (80.9 percent), a non-religious organization (77.1 percent), or a volunteer group (78.0 percent). Nevertheless, most (68.4 percent) claim to

receive quite a bit to a great deal of emotional support from family, relatives, and friends. Economically, many (38.9 percent) were still working, and majority (52.7 percent) had difficulties meeting household expenses due to the lack of household income.

Table 3: Proportion of respondents by level of life satisfaction with their present life and by control variables

Control Variable	Life Satisfaction			% of Total N	Total N	Sig.
	Very satisfied	Somewhat satisfied	Not satisfied			
Age					2,965	
60 – 69	34.3	54.0	11.6	62.3		
70 – 79	33.1	54.8	12.1	28.4		
80 +	38.0	50.4	11.6	9.3		
Sex					2,967	**
Female	35.8	54.1	10.2	58.6		
Male	32.2	53.7	14.1	41.4		
Education					2,966	***
None/pre-school	24.2	56.2	19.7	6.0		
Elementary	32.7	56.6	10.7	60.8		
High school	37.1	47.5	15.5	22.7		
College +	43.1	51.1	5.8	10.6		
Marital Status					2,967	*
Never married	43.1	51.4	5.6	4.9		
Currently married/live-in	33.4	55.0	11.6	57.8		
Widowed and separated/ divorced	34.7	52.4	12.9	37.3		

Note: * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

Independent Variables and Statistical Analysis: Cross-Tabulation and Chi-Square Test

Cross-tabulation shows the distribution of respondents by level of life satisfaction (very satisfied, somewhat satisfied, not satisfied) and by category under each variable in Figure 1. A chi-square test of independence helps determine whether there is a statistically significant relationship or association between the level of life satisfaction and the health, social engagement, economic condition, and demographic variables (Laerd Statistics 2018a). A significant relationship exists if a variable significantly affects the probability that a respondent would have a particular level of life satisfaction.

Control Variables: Which Demographic was Associated with Dissatisfaction?

Among the control variables, cross-tabulation results show that the highest proportion of dissatisfied older people within each category of each variable occurred among those who were male, had no schooling or reached only pre-school, and widowed or separated (Table 3). Results of the chi-square test also show that a significant relationship exists between the level of satisfaction and control variables such as education, sex, and marital status. Similar to other findings (Celik et al. 2018, 406), the variation in age does not have a significant relationship with life satisfaction.

Predictor Variables: Which Other Characteristics were Associated with Dissatisfaction?

In the case of predictor variables, all health variables showed a significant relationship with the level of life satisfaction (Table 4). The highest proportion of dissatisfied older people occurred among those who self-assessed themselves as unhealthy, had decreased chewing ability (from being able to chew the hardest food to being able to chew only hard food), were experiencing severe or extreme pain, had difficulty in performing at least one activity in daily living, and were having depression symptoms.

Table 4: Proportion of respondents by level of life satisfaction with their present life and by predictor variables

Predictor Variable	Life Satisfaction			% of Total N	Total N	Sig.
	Very satisfied	Somewhat satisfied	Not satisfied			
Health						
Self-assessed health status					2,957	***
Very healthy	48.4	44.6	7.0	22.2		
Of average health	32.7	56.8	10.5	47.8		
Unhealthy	26.7	56.0	17.2	30.0		
Chewing ability					2,968	**
Excellent	37.6	51.4	11.0	44.3		
Very good	33.7	58.5	(7.8)	10.3		
Good	32.3	53.0	14.6	19.4		
Poor	30.5	56.8	12.7	26.0		
Presence or intensity of bodily pain					2,965	***
None	36.1	52.4	11.4	34.5		
Mild	36.4	53.1	10.5	34.8		
Moderate	29.7	60.7	9.6	22.7		
Severe/Extreme	30.8	44.0	25.2	7.9		
Difficulty in activities in daily living					2,967	***
With no difficulty	36.8	53.3	9.8	87.1		
With at least one difficulty	17.2	57.7	25.1	12.9		
Depression symptoms					2,917	***
Without depression symptoms	43.3	50.9	5.8	61.3		
With depression symptoms	20.3	59.8	19.9	38.7		

Notes: * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$. The proportions corresponding to a life satisfaction level, in parentheses, are based on less than 30 cases.

Table 4: (continued)

Predictor Variable	Life Satisfaction			% of Total N	Total N	Sig.
	Very satisfied	Somewhat satisfied	Not satisfied			
Social Engagement						
Amount of emotional support					2,912	***
A great deal	54.9	38.1	7.0	37.7		
Quite a bit	19.7	69.2	11.0	35.2		
Not much or not at all	21.2	60.1	18.7	15.1		
Keep to myself	31.1	49.6	19.4	12.1		
Membership in a religious organization					2,959	**
Member	39.5	51.7	8.7	19.4		
Not a member	32.9	54.5	12.6	80.6		
Membership in a non-religious organization					2,967	***
Member	40.8	47.6	11.6	23.3		
Not a member	32.3	55.8	11.9	76.7		
Engagement in volunteer work					2,938	***
Volunteer	43.6	47.0	9.4	22.1		
Not a volunteer	31.8	55.7	12.5	77.9		
Economic Condition						
Work Status					2,964	
Working	32.4	56.8	10.9	40.4		
Stopped working completely	35.7	52.0	12.3	52.2		
Not working	35.0	52.3	12.7	7.4		

Notes: * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$. The proportions corresponding to a life satisfaction level, in parentheses, are based on less than 30 cases.

Table 4: (continued)

Predictor Variable	Life Satisfaction			% of Total N	Total N	Sig.
	Very satisfied	Somewhat satisfied	Not satisfied			
Wealth index (quintile)					2,547	
Poorest	36.1	54.7	9.2	21.7		
Second	34.4	54.7	10.9	22.3		
Middle	34.9	51.5	13.5	19.4		
Fourth	37.1	52.5	10.4	18.1		
Wealthiest	34.9	53.0	12.1	18.5		
Adequacy of household income					2,942	***
More than enough	48.3	49.3	(2.4)	7.1		
Just enough	42.0	51.8	6.2	39.6		
Somewhat inadequate	30.9	55.0	14.1	33.3		
Very inadequate	19.2	58.7	22.1	20.0		

Notes: * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$. The proportions corresponding to a life satisfaction level, in parentheses, are based on less than 30 cases.

All social engagement variables had a significant relationship with the level of life satisfaction. The higher proportion of dissatisfied occurred among those who kept their problems to themselves, not a member of a religious or non-religious organization, and not a volunteer in the church or community.

Economic condition variables such as work status and wealth did not have a significant relationship with the level of life satisfaction. There was only a slight difference in the proportion of dissatisfied older people among the various categories of these variables. However, the adequacy of household income in meeting household expenses did have a significant relationship with life satisfaction. The proportion of the dissatisfied rose as the household had more difficulty in meeting household expenses.

These results suggest that having income-generating work or being wealthy per se does not guarantee life satisfaction. It was the ability to meet financial needs that mattered. If household expenses are too high and too difficult to meet even if an older person still works or is wealthy, the probability that the person would be satisfied will be adversely affected.

Results of Binary Logistic Regression: What is the Likelihood of a Demographic or Attribute Affecting Life Satisfaction?

The binary logistic regression analysis¹¹ helped determine the odds (how high or low) that older people would be “not satisfied” given a certain characteristic, as opposed to another characteristic (Laerd Statistics 2018b). Initially, an analysis was conducted separately for each regression model¹² corresponding to each of the four set of variables (health, social engagement, economic condition, and demographic variables). After determining which characteristics from each set tend to significantly affect the probability that an older person will not be satisfied with his or her present life, the study conducted an analysis using an adjusted regression model, which incorporates all significant characteristics.

Results of the binary logistic regression analysis show the variable categories which have a significant relationship with older Filipino people’s dissatisfaction. Among the control variables, sex, education, and marital status were found significant (Table 5). Specifically, older males with lower levels of education relative to college or higher, have higher odds of being dissatisfied. On the other hand, those who were never married and who were currently married or living-in with a partner have lower odds of being dissatisfied than those who were widowed or separated.

Among predictor health variables, the following decrease the odds of dissatisfaction: being very healthy as compared to being unhealthy, experiencing lower levels of pain (mild, moderate) as compared to experiencing severe or extreme pain, having no difficulty in performing activities in daily living as compared to having at least one difficulty, and having no depression symptoms as compared to having depression

symptoms. On the other hand, having good as compared with having excellent chewing ability was found to significantly increase the odds of not being satisfied.

Table 5: Results of the binary logistic regression analysis for the variables and being dissatisfied (0=satisfied; 1=not satisfied)

Variable	Odds Ratio (Exp B)				
	Model 1	Model 2	Model 3	Model 4	Model 5
Control Variables					
Age (ref = 60 to 69)					
70 to 79	0.979	-	-	-	-
80 or over	0.901	-	-	-	-
Male	1.632***	-	-	-	1.952***
Education (ref = College or over)					
None/pre-school	3.831***	-	-	-	1.554
Elementary	1.852*	-	-	-	0.979
High school	2.938***	-	-	-	1.811*
Marital status (ref = Widowed/ separated)					
Never married	0.351**	-	-	-	0.304**
Currently married or live-in	0.724*	-	-	-	0.699*
Predictor health variables					
Self-assessed health status (ref = Unhealthy)					
Very healthy	-	0.571**	-	-	0.669*
Of average health	-	0.808	-	-	-
Chewing ability (ref = Excellent)					
Very good	-	0.641	-	-	-
Good	-	1.392*	-	-	1.466*
Poor	-	0.863	-	-	-

Note: * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

Table 5: (continued)

Variable	Odds Ratio (Exp B)				
	Model 1	Model 2	Model 3	Model 4	Model 5
Presence/intensity of bodily pain (ref=Severe/extreme)					
None	-	0.759	-	-	-
Mild	-	0.502**	-	-	0.649**
Moderate	-	0.375***	-	-	0.437***
Without ADL difficulty	-	0.515***	-	-	0.500***
Without depression symptoms	-	0.271***	-	-	0.321***
Predictor Social Engagement Variables					
Amount of emotional support (ref = A great deal)					
Quite a bit	-	-	1.497**	-	1.133
Not much or not at all	-	-	2.776***	-	1.995***
Problems kept to self	-	-	2.829***	-	2.131***
Religious org membership	-	-	0.716	-	-
Non-religious org membership	-	-	1.090	-	-
Volunteerism	-	-	0.843	-	-
Predictor Economic Condition Variables					
Work status (ref = Not working)					
Working	-	-	-	0.863	-
Stopped working completely	-	-	-	1.042	-
Wealth index	-	-	-	1.091	-
Adequacy of household income (ref=Very inadequate)					
More than enough	-	-	-	0.050***	0.123***
Just enough	-	-	-	0.197***	0.332***
Somewhat inadequate	-	-	-	0.523***	0.651**
Number of cases included in the analysis (N)	2,932	2,887	2,932	2,379	2,887
Nagelkerke R Square	0.036	0.137	0.041	0.094	0.217

Note: * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

In contrast to the results of the cross-tabulation and chi-square tests, regression results¹³ showed that—membership in religious or non-religious organizations as compared to non-membership, and volunteerism as compared to non-volunteerism—did not have significant relationships with dissatisfaction. However, receiving lower amounts of emotional support (quite a bit, not much or not at all, or none as problems were kept to oneself), as compared to receiving a great deal of it, can significantly increase the odds of not being satisfied.

In accordance with the results of cross-tabulation and chi-square tests, among economic variables, work status and wealth did not have a significant relationship with dissatisfaction. On the other hand, adequacy of household income in meeting expenses was significant. Having no or some difficulty in meeting household expenses (with somewhat inadequate income, with just enough income, or with more than enough income) as compared with having considerable difficulty in meeting household expenses (with very inadequate income), can significantly decrease the odds of not being satisfied.

The results of the regression analysis using the adjusted model (model 5) are consistent with those for each set of characteristics and circumstances (models 1 to 4). All the characteristics that were earlier found significant were still significant except for two: (1) having no/pre-school education and having elementary education as compared with having college education or higher, and (2) receiving little emotional support as compared with receiving a great deal of emotional support. The latter was significant only if the amount of support received differed greatly.

Interviews with Elderly Filipinos

Interviews of older Filipinos were conducted from 7 to 14 May 2019 in the province of Laguna, one of the survey areas of the 2007 PSOA. The respondents were selected using purposive sampling, with age and capacity as the criteria to elaborate on their level of life satisfaction. Table 6 identifies the profiles of the respondents.

The interviews helped explore the context in which the determinants of life satisfaction may operate. Also, since the research with the respondents can be considered phenomenological, focusing on their experience of life satisfaction or dissatisfaction, the small sample size of six falls within Polkinghorne's recommendation (1989, as cited in Creswell 2007, 61) of five to 25 samples, and allows more analysis and attention to detail. A male and a female informant were interviewed¹⁴ for each of three age groups: 60–69 years, 70–79 years, and 80 years and over. The respondents were only asked whether they are satisfied or not with their present life, and why. Exploratory and flexible probes sought to clarify answers. In the structured part of the interview, the respondents were asked about their demographic and socioeconomic characteristics such as age, sex, marital status, educational attainment, address, and telephone number.

The respondents' answers on why they were satisfied or dissatisfied with their present life were coded and analyzed. Descriptive codes¹⁵ (Gibbs 2007, 42, 44) were listed. Subsequently, analytic codes¹⁶ (Gibbs 2007, 43–44) were also identified. Since thematic ideas could be obtained from previous studies and the results of quantitative analysis, a concept-driven coding¹⁷ was employed. In addition, a data-driven coding¹⁸ was used when new ideas were detected in the text.

The six respondents belonging to the three age categories illustrated the context and manner by which older Filipino people were satisfied or not satisfied, as affected by the control and predictor variables (Table 6). When asked whether they are satisfied or not with their present life, and why, the six respondents provided various main reasons (Table 7). The reasons consisted of the following:

- Health factors such as self-assessed health status, ability to perform daily tasks, absence of bodily pain, absence of depression, and resilience;
- Social engagement factors such as emotional support, physical support, and membership in religious, non-religious, and volunteer groups;

- Economic factors such as adequacy of household income in meeting household expenses, absence of financial burden from children, and receipt of financial support from children;
- Other factors like faith which gives feelings of security and gratitude for good things.

Tables 8 and 9 indicate the descriptive and analytic codes of factors that tend to increase or decrease life satisfaction. The respondent numbers were indicated in the parentheses.

Good physical health was a factor in the life satisfaction of two respondents; they were grateful that they were not experiencing physical difficulties commonly associated with old age. During the face-to-face interview, Respondent 6 wrote on the questionnaire in Filipino (All responses were in Filipino. Translation is by the author):

I am satisfied with my current status because of the many years God has given me, and now I am still strong and my body is healthy. This is already a big bonus from God for me.

Aside from good health, Respondent 6 was also in good economic standing because he enjoys a high position in their profitable family-owned business. His children were also all successful professionals, and have high incomes. Thus, their household income was more than enough to meet their expenses. In terms of social engagement, he had a good source of emotional support in his wife whom he described as supportive. He also had social links with other professionally successful men through a nonreligious organization. Adequacy of household income also appeared significant for him; he related that when his children were still in college, he felt uncomfortable whenever he could not provide adequate money for them.

Table 6: Demographic and socioeconomic characteristics of interview respondents

Respondent No.	Age Category	Sex	Other Demographic and Socioeconomic Characteristics
1	60-69	Female	Married, college graduate, working as wage-employee in the private sector
2	60-69	Male	Married, college graduate, stopped working completely due to retirement
3	70-79	Female	Separated, with master's degree, working as wage-employee in the private sector
4	70-79	Male	Married, college graduate, stopped working completely due to retirement and illness
5	80 or over	Female	Widowed, elementary graduate, not working and never worked
6	80 or over	Male	Married, college graduate, working or self-employed in his family-owned business

On the other hand, for two other respondents, good mental health was one of the main reasons for their satisfaction which served to cushion them from disappointments. Respondent 2 was not depressed and was still happy with himself, despite the fact that he receives a meager amount of pension (PHP 6,000 per month), could not ask his child for financial assistance, and no longer together with his wife who lives abroad. He explained that his pension was small because his jobs were contractual. He was not aware that he should have continuously made voluntary social security contributions during times of unemployment so that his future pension could be higher. He also implied that the 20-percent discount for senior citizens was not enough to alleviate his financial difficulties. The potential disappointment from his situation may have been tempered by the absence of any health problem and by the hope that the government could still increase pensions and provide universal health care benefits, especially to outpatients for disease prevention. When asked again whether he was satisfied with his present life given his current situation, he replied, “I am still satisfied but I still want to ask for help from the government.”

Like Respondent 2, Respondent 4 was also having financial difficulties. He also has ADL difficulties since he suffered a stroke. However, he appeared resilient as he peacefully accepted that life involves both hardships and comfort.

What I can say is that at my age, I have already experienced comfort [kaginhawahan]. Physical, emotional. Getting sick does not mean I will no longer be happy. Life is really like this, you will get to experience hardship and comfort.

Table 7: Life satisfaction and main reasons identified by the interview respondents

Respondent No.	Life Satisfaction	Main reasons for being satisfied or not satisfied
1	Satisfied	Emotional support from children; absence of financial burden from children; absence of bodily pain; ability to perform daily tasks; gratitude to God for abilities
2	Satisfied	Absence of depression symptoms
3	Satisfied	Membership in religious, non-religious, and volunteer groups; faith that gives security
4	Satisfied	Financial support from children; emotional and physical support from wife; resilience
5	Not satisfied	Inadequacy of household income in meeting household expenses; resentment on relative's failure to help her receive financial assistance from the local government unit
6	Satisfied	Self-assessed good health status; gratitude to God for long life

Table 8: List of factors^a that tend to increase life satisfaction

Category	Analytic Code	Descriptive Code
Health	Self-assessed good health status (6)	Still strong and with a healthy body (6)
	Ability to perform daily tasks (1)	Ability to do daily household chores like cleaning (1)
	Absence of bodily pain (1)	Not feeling anything bad with own body (1)
	Absence of depression symptoms (2)	Happy with himself (2)
	Resilience (4)	Acceptance that life involves both hardships and comfort (4)
Social Engagement	Emotional support from children (1)	Children's reminders to eat on time, exercise, and celebrate with friends (1)
	Emotional and physical support from wife (4)	Receiving care and assistance from wife especially now that he has physical difficulties (4)
	Membership in religious, non-religious, and volunteer groups (3)	Appreciation of own ability to still contribute and do good things in society (3); Gratitude for not being stuck at home such that she was able to avoid seeing all problems and feeling useless (3)
Economic condition	Absence of financial burden from children (1)	Absence of problem with children because all of them have jobs (1)
	Financial support from children (4)	Receiving financial help from children (4)
Others	Faith (1, 3, 6)	Gratitude to God for being able to manage things so as not to feel anything bad physically (1); Security through unity with God for guidance and protection from harm (3); Gratitude to God for long life (6)

^a with multiple responses

Only he and his wife were in the household. Their income was often not enough to meet their expenses. Both were not receiving any pension, and their only source of income was his wife's low-paying job. Their children gave them financial assistance, but he claimed that this was insufficient for expenses, which included medicines and check-ups. Nevertheless, he reiterated that he was happy because his children were not giving him problems and stress. They were obedient and were helping

financially. A major factor related to his optimistic disposition was the great deal of emotional and physical support from his wife. She always listens to his concerns and had been assisting him in ADL, such as taking a bath, dressing, eating, standing up from and sitting down on a bed or chair, walking at home, and using the toilet. When asked whether he would still be happy if his wife would not take care of him, his answer suggested that her emotional and physical support was very significant to him: "I will not be happy if I will not be taken care of."

Table 9: List of factors^a that tend to decrease life satisfaction

Category	Analytic Code	Descriptive Code
Economic condition	Inadequacy of household income in meeting household expenses (5)	Children and grandchildren getting a part of respondent's income for household needs like food, with small amount left for the respondent (5); Very low amount of pension (2)
Others	Resentment on relative's failure to help her receive financial assistance from a local government unit (5)	Inability of younger relative to find a way for her to also receive financial assistance from a local government unit (5)

^a with multiple responses

Economic condition variables were significant for three respondents. Because of Filipino close family ties, the absence of financial difficulties among her children contributed to Respondent 1's satisfaction. They occasionally gave her money, and she did not worry about their financial standing. Close family ties were also apparent in Respondent 4's satisfaction; his children gave financial support as well. Although the assistance was not enough to meet all his needs, he was satisfied that his children were concerned about his welfare.

In contrast, close family ties worked to Respondent 5's disadvantage. She was not satisfied, having inadequate household income. Although she had a source of income, she shared it with her children and grandchildren living with her, and claimed that very little was left for her own needs. These accompanying difficulties made her resentful of a younger relative's inability to help her secure financial assistance from a local government unit. She claimed that this younger relative was able to help another older relative, who had almost the same socioeconomic characteristics as she did, receive financial assistance. Thus, she could not understand why she could not qualify for assistance. Because of her advanced age, Respondent 5 seldom went out of the house and thus could not follow up her request for financial support. She told the researcher,

I do not have a husband ... My husband died several years ago. I do not have a job except ... I just have a little (something) for rent. And my children live with me. Sharing with me the income, food. Oh, how little (amount of money) is being left, *lneng*.

This illustrated the disadvantages of having a low level of education, unemployment, not having a pension, advanced age, and being widowed. It also highlighted the inadequacy of household income in meeting expenses as a continuing source of difficulties that make life dissatisfying.

Only one respondent highlighted membership in organizations as one of the major reasons for her life satisfaction. For Respondent 3, her membership in religious, non-religious, and volunteer organizations enabled her to still do many good things, be a good example to other people, and contribute to society. This experience enhanced her purpose in life and made her a part of the solution to problems. When probed to confirm that social activities were important to her, she highlighted faith in God.

The main (activity) is the spiritual exercises everyday. And unity with God. So that you are guided throughout the day. To save you from all (harm). That is the main (activity).

Faith also appeared important to two other respondents as they expressed gratitude to God. Respondent 1 thanked God that she was able to manage things in her life so that she would not feel anything bad physically. Likewise, Respondent 6 was grateful to God for blessing him with long life. These two respondents were not members of any religious organization. Nevertheless, their expression of faith indicated that this could be an additional variable influencing life satisfaction.

Discussion

The findings from both quantitative and qualitative analyses showed that life satisfaction among older Filipino people tended to be significantly influenced by education, marital status, self-assessed health status, absence of depression symptoms, absence of difficulty in performing activities in daily living, low level of bodily pain, amount of emotional support, and adequacy of household income in meeting household expenses.

As in other countries, having a low level of education in the country poses economic disadvantages related to unemployment and inadequate household income. Low levels of education hinder people from getting formal work, and if they do get hired, they often occupy low-paying and contractual jobs. This circumstance makes pensions difficult to acquire. It is a significant concern since having formal financial support like pension is crucial to meeting needs when people can no longer work but still incur additional expenses due to deteriorating health. The problem is magnified in the case of a widowed female who has never worked, has little to no income-generating assets, and is not receiving any pension. Although Filipino culture features close family ties, an older person may not find financial support if her family also has meager resources. On the contrary, she may find herself sharing whatever she has, resulting in little provision for her own needs. In the absence of purchasing power, more financial assistance in addition to the 20-percent discount for purchases, provided by law, can significantly help a poor older person. Thus, other forms of assistance specific to poor older people should be considered or extended.

Maintaining good health and having no difficulty in performing activities in daily living are also important, not only to protect older people from inconveniences and distress but also to prevent them from incurring higher health expenses that may drain resources and make household income less adequate. In the Philippines, the government provides financial assistance for in-patient and outpatient services through PhilHealth. However, due to PhilHealth's limited coverage, other forms of medical assistance for poor older people are necessary.

Moreover, since receiving adequate amounts of emotional support is significant for older people, government programs promoting their well-being should include not only financial support but also emotional assistance. Social workers may conduct home visits to provide emotional succor, especially to older people who find it difficult to get out of their homes.

Conclusion

This study identified significant health, social engagement, economic, and demographic factors that affect life (dis)satisfaction among older Filipino people. The findings showed the intertwined factors and interrelated effects that should be addressed to improve the satisfaction and well-being of older people who are vulnerable to the increasing challenges of aging. Specifically, the results highlighted physical difficulties that usually come with growing old, as well as the importance of emotional support and financial resources to cope with or address difficulties or challenges.

Physical challenges such as bodily pains, sickness, and difficulties in performing daily activities could cause distress among older people. Physical assistance and emotional support could significantly help them cope with these challenges. In addition, financial resources are important since the deterioration of health entails additional costs for medical care. With this, older people who have no formal employment or have no adequate pension and health insurance may have difficulties in meeting their personal needs as well as those of other household members who depend on them. Thus,

there is a need to review the current public policies, especially on health care assistance and public pension to determine how older persons may be more effectively assisted and how their welfare may be improved.

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Endnotes

- ¹ This paper used the terms “elderly Filipinos” and “older Filipinos” to refer to Filipinos 60 years old and over.
- ² In the study by Ngoo, Tey, and Tan (2015), overall life satisfaction was measured as composite index by asking respondents how satisfied or dissatisfied they were concerning 16 aspects of their lives. These included education, health, job, housing, marriage, neighbors, friendships, household income, standard of living, leisure, family life, spiritual life, environmental condition, public safety, the democratic system, and social welfare system (Ngoo, Tey, and Tan 2015, 145).
- ³ Some of the variable names were the actual terms used in the PSOA, and in Celik et al. (2018), while other variables were renamed and given another category name. In designing the conceptual framework, the author referred mainly to the PSOA questionnaire and selected the data that would be needed for the study. For work status, the question “A13. Are you currently working?” was selected. This question pertains to work status so the term “work status” was used as variable name. Regarding social engagement, questions regarding membership in organizations (e.g., “G6. Are you currently a member of any religious group or organization, e.g. CWL, CFC, Knights of Columbus, Men’s Fellowships, etc.?”; and “G7. Are you a member of any other type of non-religious organizations?”) and engagement in volunteer work (e.g., “G9. Are you engaged in any volunteer work in church or community, such as feeding program, teaching catechism, community services, etc.?”) were selected from the questionnaire section titled “Block G. Tasks and Activities.” There are other activities in Block G, but since the selected questions pertained to activities which indicated participation in community activities, the term “Social Engagement” was used. These terms do not appear in the conceptual framework of the 2007 PSOA. Further, the main dependent variable in the PSOA report is health status and the second main dependent variable is health transitions. This is the reason why there is a difference regarding the independent variables considered.
- ⁴ To learn more about the PSOA survey, refer to Cruz et al. (2016, 20–2). They identified two types of information. The first covers data on the individual respondent and his/her household. The second type pertains to anthropometric measurements. The survey instruments consisted of the household questionnaire and the main individual questionnaire.
- ⁵ A discussion of the validation study done for the 12-item version of the CES-D scale used in the 2007 PSOA can be found in the PSOA project report (Cruz et al. 2016, 64–65).
- ⁶ Merging reduced the number of categories. For instance, under the variable amount of “Bodily Pain,” the categories “Severe” and “Extreme/Cannot function because of pain” were merged into “Severe/Extreme.” For some other variables, categories were

merged and renamed. For example, the variable “Chewing Ability” indicated by the respondents’ ability to bite and chew foods ordered from hardest to softest, the two softest categories of foods were merged, and all the food categories were renamed to indicate the corresponding level of chewing ability. Categories were also created for other variables by recoding values, computing for sums, and/or assigning new value labels. For example, for the variable “Difficulty in activities in daily living (ADL),” the values corresponding to the answers on whether respondents find it difficult to perform each of the seven identified daily activities were recoded to indicate presence or absence of difficulty in each activity. These were then added to obtain one figure pertaining to all activities, recoded again to indicate absence of difficulty in all activities or presence of difficulty in any one activity, and labeled to create the categories, “Without ADL difficulty” and “With ADL difficulty.”

⁷ The categories “very satisfied” and “somewhat satisfied” were merged to create the category “satisfied” for the dependent variable “life satisfaction.” The two previous categories were combined because they can be considered “satisfied” in general. Moreover, in the study, being “satisfied” was the norm (i.e., the group of “not satisfied” older people was the smallest group in the original three groups). The study also wanted to know more about the deviation from the norm (i.e., what are the characteristics of older people who are not satisfied), to help determine what could truly make older people satisfied. Thus, the category “satisfied” was also deemed the preferable reference category since it was normative or it was the large group (Grace-Martin n.d.).

⁸ The difficulty in activities in daily living (ADL) was based on the PSOA Main Questionnaire’s data on questions regarding “Ability to Perform Daily Activities” (pp. 16–17). Daily activities included (1) Take a bath/shower by yourself; (2) Dress; (3) Eat; (4) Stand up from a bed or chair; sit down on a chair; (5) Walk (around the house); (6) Go outside (leave the house); and (7) Using the toilet. Survey respondents were asked whether they find it difficult to perform each of these activities due to their health or physical state. Possible answers were: 1_Difficult; 2_Not difficult; and 3_Not sure. An answer of “Difficult” in any of the activities meant the respondent has ADL difficulty. Without ADL difficulty were those who did not answer “Difficult” in any of the activities. To create the two new categories, the values of the answers for activity 1 to 7 were recoded: (1=1) and (2, 3=0). The total value (with a new variable name) of the answers for activity 1 to 7 was then computed using the “compute” syntax in SPSS. The total values with the new variable name were then recoded into a second new variable (Difficulty in ADL) using the “recode” syntax: (.00=0) (1.00 thru 7.00=1). Then, the “val lab” syntax was used to create the two categories of the second new variable: .00 “with no difficulty” 1.00 “with at least one difficulty.” The value labels corresponded to the categories “Without ADL difficulty” and “With ADL difficulty” respectively.

⁹ This pertains to the “CES-D SCALE” section of the PSOA Main Questionnaire (p.

20). There were 12 statements, and survey respondents were asked to what extent the statements apply to them. Nine of the 12 statements were negative (e.g., “I felt lonely”) and three were positive (e.g., “I felt happy”). Each possible response for each statement had a corresponding score: Rarely/Not at all – 1; Sometimes – 2; Often – 3. Higher total scores indicated depression symptoms. Since the scores 1, 2, and 3 for each statement corresponded to frequency of feeling not only negative conditions but also positive ones, in computing for the total score for each respondent, the 1, 2, and 3 scores for negative statements retained their values. The 1, 2, and 3 scores for positive statements were changed: 1 became 3, 2 remained 2, and 3 became 1. The total scores ranged from 12 to 34. The cut-off score of 19 was adopted since Cruz et al. (2016, 64) indicated that this is the cut-off score determined through a validation study with a licensed physician applying the DSM-IV criteria among a sample of Filipino older persons who were administered the CES-D scale.

¹⁰ The variable “Adequacy of household income” pertains to question H5 under the “Income and Assets” section of the PSOA Main Questionnaire: “When you think about the income of all the members of your household and all the expenses for maintaining (or running) the whole household, would you say: (CHECK ONE ONLY).” The possible answers were: “1_There is enough (income), with money left over; 2_Just enough to pay expenses, with no difficulty; 3_Some difficulty in meeting expenses; 4_Considerable difficulty in meeting expenses; 7_DK; 8_NI.” The PSOA values for the variable H5 were recoded: (1=1) (2=2) (3=3) (4=4) (7,8=sysmis). Based on the question for item H5, the variable was named “Adequacy of household income.” The four categories were named based on description/responses (e.g., “More than enough” if “1_There is enough (income), with money left over”). Dummy variables were created for the categories, for the logistic regression. This was done by recoding H5, e.g., (1=1) (else=0) into “More than enough HH income.”

¹¹ The binary dependent variable took a value of 1 if the respondent was not satisfied and 0 if satisfied. The categories “very satisfied” and “somewhat satisfied” were combined for the new category “satisfied.”

¹² The regression models and their corresponding set of variables were:

Model 1- for control variables;

Model 2- for predictor health variables;

Model 3- for predictor social engagement variables;

Model 4- for predictor economic condition variables; and

Model 5- for the set of all variables found significant in Models 1 to 4.

¹³ A correlation test was conducted among independent variables. There were significant correlations but the correlation coefficients were very low. The correlations were mostly negligible (i.e., with values ranging from 0.01 to 0.19).

¹⁴ Each interviewee received a research information sheet explaining the study. Consent forms indicated his/her willingness to participate in the study.

- ¹⁵ Descriptive codes are phrases that encapsulate the reasons for satisfaction or dissatisfaction, as mentioned by the respondent.
- ¹⁶ Analytic codes are phrases that categorize the descriptive codes based on what they mean, indicate, or imply.
- ¹⁷ Concept-driven coding is employed when the categories or concepts which the codes represent are obtained from the literature, previous studies, topics in the interview schedule, pre-existing theory, and/or other sources (Gibbs 2007, 44-46).
- ¹⁸ Data-driven coding is employed when the researcher identifies categories or concepts as codes based on the data, without starting with any preconceived ideas or expectations (Gibbs 2007, 45-46).

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