

ASSESSMENT OF THE COMMON PREDICTORS AND THEIR CORRELATION IN SUBJECTIVE WELLBEING AMONG ELDERLY IN BOHOL, PHILIPPINES

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ABSTRACT

Background and objectives: The United Nations (2013) and the World Health Organization (2011) predicted inflation in the number of elderlies in the age group of 6 years and above by twice their current population and this has prompted researchers to address concerns regarding the elderly's general wellbeing. This study aimed to determine the predictors that affect the subjective wellbeing among elderlies. The researchers intended to evaluate whether selected individual variables (educational attainment, health status, employment status, and presence of stressors), family variables (marital status, family size, family income, quality of family relationship and family support), and neighborhood variables (social relationships, church attendance, access to amenities/transportation, safe environment and community participation) influence the achievement of subjective wellbeing among elderlies in Bohol, Philippines.

Methods: The researcher utilized a descriptive correlational design in order to identify patterns of relationship that existed between the variables and to measure the strength of the relationship. The study was conducted in the municipality of Sagbayan, Bohol, Philippines. The researcher utilized a self-made interview guide, the Perceived Stress Scale, Spiritual Wellbeing Scale and the Satisfaction with Life Scale (SWLS) to gather the needed information relevant to the variables under study. Collection of data commenced after the technical panel approved the research proposal. Multiple regression using the SPSS software was utilized in the treatment of the data gathered.

Results: It was found out that the mean level of subjective wellbeing among elderly falls under the average level of life satisfaction 4.23 which means that the elderlies are generally satisfied with the different aspects of their lives but there are certain domains that they would very much like to improve. The study also revealed that the significant predictive variables for the elderlies' subjective wellbeing include age (0.000), health status 0.031, perceived stress 0.000, community participation 0.001, family income 0.000, and neighborhood safety 0.003. Furthermore, it was found out that the most common medical conditions or diseases affecting the subjective wellbeing of the respondents are upper respiratory tract infection (46), hypertension (35), generalized muscle pains (25), arthritis (24), and visual problems or disturbances (21).

Conclusion: Increased levels of subjective wellbeing among the elderly are significantly influenced by age, health status, perceived stress, community participation, family income, and neighborhood safety. The researcher recommends the conduction of further studies exploring other factors that can influence the subjective wellbeing among the elderly as well as the development of programs and initiatives by the local and national government units to enhance the factors that affect the subjective wellbeing of the elderlies.

Keywords : *Aged, Family Characteristics, Health Status, Subjective Wellbeing, Family Characteristics, Social Characteristics, Life Satisfaction, Personal Satisfaction*

INTRODUCTION

The Economic and Social Affairs of United Nations (2013) recently forecasted that the present number of older individuals aging 60 years and above will be more than double in the year 2050, that is from 841 million elderlies in 2013 to a whopping 2 billion in 2050. The World Health Organization (2011) also projected that the aging population will outnumber the younger population for the first time in the year 2047. Hence it is projected that 8 out of 10 elderlies will live in less developed areas in the world (Economic & Social Affairs – United Nations, 2013). According to the latest figures of the National Statistics Coordination Board in the Philippines, the elderly dependent population (aged 65 and older) makes up 3.83% of the population and is expected to rise to 10.25% by the year 2025 (De Leon, 2014). The projected increase of the aging population has drawn considerable attention to the general health and wellbeing of elderly particularly their subjective wellbeing which has been considered as one of the indicators of health and an important variable that affects the elderlies' quality of life (Zhang, 2010).

As defined by Diener (2009), subjective wellbeing pertains to how a person experiences the quality of life through cognitive judgments and emotional reactions. McGillivray and Clarke (2006) asserted that subjective wellbeing encompasses a multidimensional assessment of life, including cognitive judgments of life satisfaction and affective evaluations of emotions and moods. Bruni and Porta (2007) emphasized that subjective wellbeing is a state of wellbeing and is an amalgamation of both the affective and cognitive aspects of human life. The Organization for Economic Cooperation and Development (2013) defined subjective wellbeing as an optimal mental state, which comprises the various positive and negative evaluations that people fabricate based on their life experiences as well as their affective reactions to these occurrences.

Subjective wellbeing is mostly influenced by optimal health and physiologic status, satisfactory relationships, amenities and transportation accessibility, neighborhood safety, financial capacity to meet needs so as to become an active member of the society (Cantarero, Potter & Leach, 2007). Factors like health, income and social relationships have been identified as predictors of elderlies' subjective wellbeing (Zhang, 2010). As cited by Gabriel and

Bowling (2004) social support and family help, physical health, functionality, level of anxiety, sense of control and environmental deficits are indicators of elderly's quality of life and subjective wellbeing.

The aim of the present study is to determine and correlate the common predictors of subjective wellbeing among elderly in Bohol, Philippines. The researchers intended to examine whether selected individual variables such as educational attainment, health status, employment status, and presence of stressors; family characteristics such as marital status, family size, family income, quality of family relationship and family support; or neighborhood variables such as social relationships, church attendance, access to amenities/transportation, safe environment and community participation play a crucial part in the acquisition of subjective wellbeing among the elderlies. This study was also designed to assess the mean level of subjective wellbeing as well as the prevailing medical conditions that affect the elderly's life satisfaction. It is presumed that there is no significant relationship between the individual, family and social variables and the subjective wellbeing of the elderly.

This study was anchored on the Human Ecology Theory which asserts that humans are both biological organisms and social beings who come in contact with different situations and settings throughout lifespan and their experiences influence their behavior in varying degrees (Sincero, 2012). In this research, elderly's subjective wellbeing will be studied for part of the quality of life, in terms of person's feeling of happiness (Zhang, 2010).

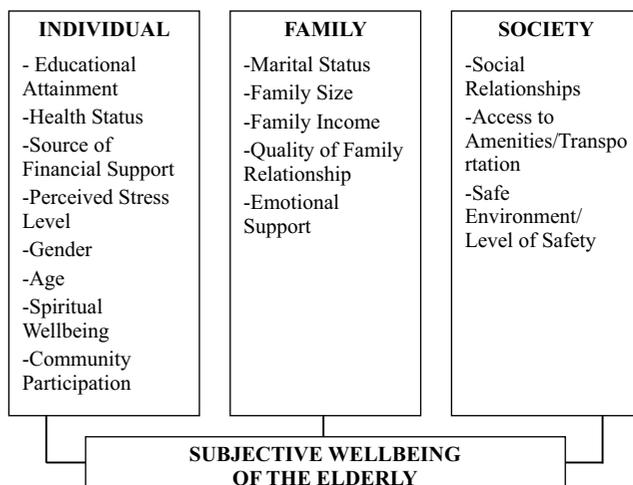


Figure 1. Theoretical/Conceptual Framework of the Study

By knowing and understanding the factors that affect the subjective wellbeing of the elderly, nurses will be able to formulate age-appropriate interventions to provide holistic care that can facilitate healthy and graceful aging. For purposes of clarity, the authors define an elderly as a male or female individual, aging 60 years old and above, who is currently residing in Bohol, Philippines. Subjective wellbeing is defined as the level of happiness or satisfaction in life as verbalized by the respondent based on the result of the Satisfaction with Life Scale (SWLS) score formulated by Ed Diener (Diener *et al.*, 1985).

Review of Related Literature and Studies

Various studies have been orchestrated to discover and examine the determinants of subjective wellbeing. Accordingly, wealth, political and civil rights, social comparisons, equality, and culture traits have been researched in predicting subjective wellbeing of nations (Diener *et al.*, 2009). Recently, George (2010) indicated that over fifty variables have been tested as determinants of subjective wellbeing and these include physical health, integration in the society, good social relationships and optimal social support, as well as psychosocial resources.

This study will review the important factors which include individual characteristics, family characteristics and social characteristics.

Individual Characteristics

Research has shown that health status and a healthy lifestyle are positively correlated with educational attainment (Michalos, 2007). However, Layard (2005) mentioned that the degree of happiness experienced by an individual is not greatly dependent on education, yet education can increase happiness by raising one's income. Molnar (2010) also concluded in his study that higher education has a further implication and considerable impact on subjective wellbeing. In another study by Ramia (2012), it was established that people with tertiary education possess disparate perceptions on what accounts for their wellbeing when compared with non-tertiary educated individuals.

Most individuals experience some decline of health condition as they enter old age. Different measures of health have been studied for subjective wellbeing. An analysis from the Berlin Aging study shows that self-rated health proved to be one of the formidable determinants of subjective wellbeing. Compared to the

chronic illness and functional health, subjective health contributes greater to individual dissimilarities in aging satisfaction and life fulfillment (Zhang, 2010). Disabilities of health condition are more inclined to constraint of physical activities and social activities, while subjective health influences individual's perception of overall wellbeing. On the other hand, people with higher levels of subjective wellbeing and life satisfaction have reported better health (Siahpush *et al.*, 2008). Self-rated health and subjective wellbeing are highly correlated.

According to an analysis by Gehring (2012), empirical data gathered from a panel of 86 countries over a period of 1990 – 2005 revealed that financial stability, legal security and property rights, access to sound money, and freedom from excessive regulation are positively correlated with higher levels of happiness. Sacks, Stevenson and Wolfers (2010) found out in their study that wealthy and affluent individuals in a given country have higher levels of satisfaction than their poorer counterparts and they have established that this correlation is homogenous in most countries worldwide. Again it was reported that socioeconomic status elucidates an average of 2.6% of the difference of subjective wellbeing, while only an average of 3.7% of the variance of subjective wellbeing can be attributed to old age and income (Zhang, 2010).

Stress is another factor that is found by researchers to influence the level of subjective wellbeing. Coyle (2010) pointed out that increased levels of uncontrollable stress were related to increased levels of negative affect. Additionally, the usage of coping strategies among individuals was linked with increased levels of positive affect and life satisfaction. Kelly and Percival (2010) stated that higher scores in the Perceived Stress Scale are associated with increased levels of stress and signify a greater tendency for stress to interfere with an individual's general health, thus, increasing a person's susceptibility to compromised health and illness.

Though there is no report of gender disparities related with subjective wellbeing but gender difference in subjective wellbeing was reported from a study. Women whose ages were below 45 years have higher levels of happiness than men at the same age. In contrast, older women have lower levels of happiness especially in rich societies (Zhang, 2010). Graham and

Chattopadhyay (2012) found that men have lower levels of wellbeing than women, with a few exceptions in low-income countries. Trzcinski and Holst (2010) found that the least satisfied were men who are unemployed, followed by men whose employment are not related to the labor market, while the highest level of subjective life satisfaction are among men in leadership position. While for women, no statistically significant disparities were observed among women who were employed in high-level leadership posts with those who worked in low and mid-level positions, and those who are unemployed.

Many researchers in various specializations have analyzed the link between subjective wellbeing and age leading to the identification of three main patterns that are linear, convex and concave. A study revealed that subjective wellbeing is usually achieved between the ages of 30 and 50 (Landeghem, 2012). This observation can be attributed to a myriad of factors such as: (a) the probability that younger generation have higher expectations than their elderly counterpart which were not achieved; (b) the older generation have more realistic expectations and are more resilient owing to their experiences which have taught them to cope and adjust to changes; (c) and individuals who are happier tend to exist longer. These arguments could all lead to lower levels of subjective wellbeing during the early years of life and a gradual increase as a person ages (Blanchflower and Oswald, 2008). As opposed to the convex relationship, only a few literatures purport that a concave (inverted U-shape) relationship between age and subjective wellbeing exists. Mroczek and Spiro (2005) illustrated a concave (inverted U-shaped) relationship between age and positive affect in which the level of subjective wellbeing increases throughout midlife and reaches its highest level at age 65, after which it constantly declines. It was also found out in their study that subjective wellbeing declines drastically a year before death. It must be noted, however, that this trend is uniform with the convex (U-shaped) correlation that peaks at the age of 65. Age and subjective wellbeing were also noted to have a linear correlation though it can remain constant throughout the life cycle or tilt in an upward or downward direction.

Actively religious people have reported markedly greater happiness and life satisfaction than irreligious

people (Ciarrochi & Deneke, 2005). Religion in people's life has been studied in spiritual beliefs and church attendance. Zhang (2010) reported that the increased levels of depression can be attributed to the lack of value and meaning of life, and that the search for the value of life necessitates connection to something larger than the lonely self. A study in the United States showed that 43% of weekly or frequent church goers and 26% of seldom or never church goers are "Very happy" with their lives (Pew Research Center, 2006). In a survey conducted by the National Opinion Research Center, it was found out that 40% of people who feel closely attachment to God feel very happy, compared to 24% of those who do not feel so. However, other studies revealed that there are no significant disparities in happiness by religion. One in every three Protestants, Catholics, and Jews has reported being very happy (Myers, 2008).

Association of subjective wellbeing with other factors such as health, and community involvement and participation has also been well researched and documented. A study conducted by English (2013) revealed that the positive effect of community involvement on the level of subjective wellbeing among individuals with health difficulties. Huppert, Baylis, & Keverne, (2004) found out that interconnectedness among members in a certain community could raise the levels of subjective wellbeing.

Family is the fundamental unit of society. Dush and Amato (2005) scrutinized the correlation between relationship status, level of happiness in relationships, and a latent assessment of subjective wellbeing. Both researchers utilized the study of Marital Instability over the Life Course and found out that marriage is associated with higher levels of subjective well-being, followed (in sequence) by cohabiting partners, established and settled dating relationships, informal dating relationships, and individuals who never dated at all. In another study conducted by Shapiro and Keyes (2007), it was found out that marriage and marital history of individuals does not greatly affect the level of social wellbeing nor does it have a decisive social well-being advantage over individuals who are not married. Juxtapositions with psychological well-being assessments signify significant disparities in the impact of marital status on individual-level wellbeing.

According to OECD Guidelines on Measuring Subjective wellbeing (2013), household size is an essential variable that should be considered in assessing subjective wellbeing. Family structure and family economic are commonly related to family members' wellbeing and attainment. Research has emphasized the correlation between family factors and life satisfaction in childhood, adolescence and adulthood.

Recent theory also demonstrated that other propositions regarding the relationship between income and subjective wellbeing. Cummins (2002) proposed that wealth increases levels of happiness as it can ensure acquisition of the individual's primary needs allowing optimal functioning that leads to higher levels subjective wellbeing. Level of income can decrease or increase with an individual's availability of living resources. All the adverse conditions may lead to low life satisfaction with negative influence on subjective wellbeing. Therefore, income is a strong predictor of subjective wellbeing, especially for the poor population. However, in a more recent study conducted by Stevenson and Wolfers (2013), they found out that no significant data could support the assertion that subjective wellbeing is influenced by income.

Eid and Larsen (2008) mentioned that family relationships appear to be consistent correlates of subjective wellbeing and this is in fact is supported the fact that satisfaction with family was related to life satisfaction across 31 nations.

Social Indicators

Clearly, social relationships are an important piece of the subjective wellbeing. Social relationships occur in many different areas of people's lives and may take many forms (Eid and Larsen, 2008). Siedlecki and colleagues (2013) used a structural equation modeling to investigate the correlation between the types of social support and subjective wellbeing among individuals aging 18 to 95. They found out that life satisfaction could be anticipated if there is social support. Positive affect was determined by family embeddedness and support availability, while negative affect was determined by perceived support. Steverink and Lindenberg (2006) also cited that the elderlies consider social relationships among the most crucial predictors of graceful aging.

Neighborhood is a very important microsystem in which people live. Neighborhoods contain two different

types of environments: physical environments and social environments. Pearlin and Skaff (1996) found that aging individuals tend to be more watchful and cautious with the type of community they dwell in as well as the safety of their neighborhood. Living in a safe, friendly neighborhood is very important, as reported by the elderly themselves (Cantarero *et al.*, 2007).

METHODOLOGY

The researchers employed the quantitative non-experimental descriptive method through a correlational study design which involves two or more factors that are assessed, gauged and documented (Jackson, 2009). The measurements are then evaluated for the presence of any trends of correlation that occurs between the variables, which in this case involve the individual, family and social characteristics and the level of subjective wellbeing among the elderly.

This study was conducted in Bohol, Philippines which is among the larger islands in the country situated in the Visayas region. The 2010 Census of Population and Housing (CPH) revealed that the province of Bohol had a population count of 1,255,128 persons as of the May 2010 population census. The number had increased by 115,998 persons compared to the 2000 CPH count of 1,139,130, with an average annual population growth rate of 0.97%. According to the Provincial Planning and Development Office, the elderlies aging 65 and above comprise 6% of Bohol's population.

Specifically, the study was conducted in the municipality of Sagbayan, Bohol. Sagbayan is one of the trade centers of people from the interior and coastal towns of Bohol. It is comprised of 24 barangays with a land area of 9675 hectares and a population of 20091 as of 2010 (Hellingman & Hellingman, 2012). According to the 2012 masterlist of the municipality, there were 1758 elderlies residing in Sagbayan. During the conduction of the study, the researcher utilized complete enumeration of the elderlies residing in all 24 barangays. An aggregate of 405 respondents took part in the study which comprised of 192 males and 213 females.

Complete enumeration was utilized in obtaining the respondents of this study. First, the researcher randomly selected 50% of the 24 barangays of the Municipality of Sagbayan, Bohol through a fishbowl method. Once the 12 barangays have been selected, all of the elderlies based on the barangays' list were

included in the study. The inclusion criteria of the research respondents included: (1) male or female aged 60 years and above and (2) currently residing in the Municipality of Sagbayan, Bohol.

The research instrument that was utilized in this study was a mixture of researcher-made interview guide as well as different standardized instruments specific for the variables under query. The instrument has two main parts. The first part explored the respondent characteristics and is further divided into three subparts that inquire about the individual, family and social characteristics. The questions under individual characteristics are composed of researcher-made questions on educational attainment, health status, financial support, community involvement and participation as well as standardized questionnaires such as the Perceived Stress Scale and the Spiritual Wellbeing Scale. The Perceived Stress Scale is a tool that measures an individual's perception of stress over the past month and determines the probability of whether the stress perceived by the individual predisposes them to health problems (Kelly *et al.*, 2010).

The Spiritual Wellbeing Scale is a tool used to measure a person's religious and existential wellbeing. It provides a comprehensive subjective assessment of an individual's perception of the spiritual aspect of quality of life, with subscale scores for Religious Wellbeing that provides a subjective evaluation of one's relationship to God and Existential Wellbeing which provides a subjective assessment of one's sense of purpose and life satisfaction. It is a twenty-item questionnaire, with ten questions assessing religious wellbeing, and ten assessing existential wellbeing (Vries-Schot *et al.*, 2012).

The questions under family characteristics delved into the respondent's marital status, family size, family's monthly income range, quality of family members' relationships, and emotional support provided by family members. The items under social characteristics probed on the respondent's quality of relationships with neighbors, access to community's amenities, transportation and safety concerns in the neighborhood.

The second part of the questionnaire is the Satisfaction with Life Scale (SWLS), a standardized measure of life satisfaction and happiness which was developed by Ed Diener and colleagues. The tool is

composed of 5 generic statements about life satisfaction that are completed by the respondents. The responses for each statement are based on 1 – 7 scale wherein a scale of 1 signifies strong disagreement while a scale of 7 means strong agreement to the statement (Kobau *et al.*, 2010).

Data gathering started after the proposal hearing and after approval to conduct the study was obtained from the panel. A formal letter seeking for permission to conduct the study was sent to the Municipal Mayor. Written consent was also secured from the respondents who can read and write while verbal consent was procured from those who cannot read nor write. The respondents were requested to answer the questions honestly and comprehensively. The researcher then collated the answers of the respondents and analyzed the results. The value of privacy and confidentiality were also taken into consideration, hence, personal identity of all the respondents was left confidential and anonymity was maintained.

The data gathered were subjected to multiple regression analysis through SPSS software to test the research hypothesis. The findings then became the basis for analysis, interpretation of results, drawing conclusions, implications and recommendations. Furthermore, with regards to choice, the respondents were given to autonomy to involve themselves in the study or not and were not forced by the researcher in anyway in their decisions after practicing fidelity or divulging the truth behind the relevance and the nature of the study. They were also given the choice not to continue in the study if they choose to do so at any point of the study.

RESULTS AND DISCUSSIONS

In this study, there were a total of 405 respondents, 47.41% of whom are males while the remaining 52.59% are females. The different attributes of the respondents, which include the individual, family and social characteristics, are presented in the succeeding tables.

Individual Characteristics

The table below reflects the different individual characteristics of the respondents that include the respondents' age, educational qualifications, health status, source of financial support, perceived level of stress, spiritual wellbeing, and community involvement and or participation

Table 1. Individual Characteristics of the Respondents

Variables	Categories	Male		Female		Total	
Age	60-65	92	47.92%	87	40.85%	179	44.20%
	66-70	41	21.25%	38	17.84%	79	19.51%
	71-75	30	15.63%	42	19.72%	72	17.78%
	76-80	16	8.33%	18	8.45%	34	8.40%
	81-85	7	3.65%	17	7.98%	24	5.93%
	86-90	5	2.60%	9	4.23%	14	3.46%
	91-95	1	0.52%	2	9.52%	3	0.74%
	<i>Total</i>	192	100%	213	100%	405	100%
Educational Qualifications	Elementary	89	46.35%	101	47.41%	190	46.91%
	High School	83	43.23%	89	41.78%	172	42.47%
	College	19	9.90%	23	10.80%	42	10.37%
	Post-Grad	1	0.52%	0	0	1	0.25%
	<i>Total</i>	192	100%	213	100%	405	100%
Health Status	Good Health	88	45.83%	77	36.15%	165	40.74%
	Adequate	67	34.90%	83	38.97%	150	37.04%
	Fair Health	25	13.02%	31	14.55%	56	13.83%
	Significant Health Challenges	12	6.25%	22	10.33%	34	8.40%
	<i>Total</i>	192	100%	213	100%	405	100%
Source of Financial Support	Employment	79	41.15%	66	30.99%	145	35.80%
	Assistance from family	70	36.46%	108	50.70%	178	43.95%
	Assistance from Government	43	22.40%	32	15.02%	75	18.52%
	None	0	0	7	3.29%	7	1.73%
	<i>Total</i>	192	100%	213	100%	405	100%
Perceived Level of Stress	Very Low	2	1.04%	0	0	2	0.49%
	Low	8	4.17%	10	4.69%	18	4.44%
	Average	53	27.60%	40	18.78%	93	22.96%
	High	89	46.35%	87	40.85%	176	43.46%
	Very High	40	20.83%	76	35.68%	116	28.64%
	<i>Total</i>	192	100%	213	100%	405	100%
Spiritual Well-Being	Yes	58	30.21%	104	48.83%	162	40%
	No	134	69.79%	109	51.17%	243	60%
	<i>Total</i>	192	100%	213	100%	405	100%
Community Involvement/ Participation	Not at all	51	26.56%	66	30.99%	117	28.89%
	Slightly	108	56.25%	123	57.75%	231	57.04%
	Actively	33	17.19%	24	11.27%	57	14.07%
	<i>Total</i>	192	100%	213	100%	405	100%

Based on the age variable, majority of the respondents both male and female belonged to the age group of 60 to 65 years old while minority belongs to the ages 91 to 95 years old. This implies that most of the elderly residing in Sagbayan, Bohol is on their early stage of late adulthood. These numbers also coincide with the National Statistics Office latest population count by age group where there were greater number of individuals under the age group of 60 to 69 compared to those aging 85 years old and above (Philippine Statistics Authority, 2012).

For the educational qualification, majority of the respondents were able to finish elementary and high school and only a few were able to finish college and post-graduate studies. This can be attributed to the fact that education during their formative years were not given too much importance and attention since most of the elderly were encouraged to help their families with farm and field works during their early adulthood. Their primary focus was on earning a living to survive the changing economy hence many did not pursue higher levels of education and at that time, the value of college education was also of less importance and less widespread. The result also coincided with the statement of the Organization of Economic Cooperation and Development (2011) that only a few had the privilege to acquire higher education in the early 1960's and even a vast majority of the young generation during that era were denied of upper secondary education in most countries. The Department of Social Welfare and Development (DSWD) together with the Department of Health (DOH) (2007) revealed that approximately, 42.84% of older persons completed only elementary education, (45.08% male and 40.60% female) while, 2.275% only had pre-school education (2.35% male and 2.20% female); 28.35% of older persons completed high school (27% male and 28.75% female) whereas, 5.845% of older persons did not finish high school (5.97% male and 5.72% female); 10.135% of older persons were college undergraduates (9.76% male and 10.51% female); and 5.72% obtained academic degree (5.62% male and 5.82% female).

Health status was also another variable under individual characteristics. Based on the data gathered, 40.74% of the respondents are in good health which means that they are generally in good physical health; 37.04% are in adequate health which means that they acquire health problems more often but these do not impede with their activities of daily living and general functioning; 13.83% are in fair health which indicates that

they have some health problems that interfere with their functioning; and 8.4% of the respondents have chronic or life threatening diseases that poses serious health challenges. This data indicates that although majority of the elderly are free from any health challenges, a few of them still encounter minor health challenges that are expected as an individual age due to certain physiologic, psychosocial and emotional changes brought about by aging. In a study conducted by De Leon (2014), the elderlies' general self-assessment of their health status is positive. The elderly subjects are conscious to keep themselves healthy and reported that they take care of their health by eating healthy or moderately, resting when tired, and doing regular exercises. Most of the elderlies also regularly go for physical check ups, taking vitamins and maintenance medicines, praying and doing recreational activities; hence they are mostly in good health and functioning.

For the source of financial support, a disparity was noted between the male and female respondents as majority of the male respondents' source of financial support are through employment while the females are mostly dependent on their families for financial assistance. The difference could be attributed to the fact that most elderly males still continue to perform income-generating activities such as farming among others even at the age of 60 and beyond provided that they are still physically capable of performing such task. This difference can also be attributed to their physical health as health can affect the productivity of an individual. In a study conducted by Goldstein and Ku (1993), it was found out that even if the elderlies can generate their own income through fieldworks and farming activities, they were also receiving financial assistance and support from their children.

The study also revealed that a larger number of the elderlies have high levels of perceived stress. Physiologic changes can involve decline in physical functioning and presence of diseases that interferes with activities of daily living. Also many elderlies are being left on their own as their children usually separated from them, which can lead to loneliness and depression causing stress. Prolonged stress in the elderlies can stem from recurrent illnesses, inability to perform activities of daily living due to presence of disabilities, and the loss of a partner or a loved one. Stress among elderlies can also be attributed to other factors such as financial concerns, a shift in the living condition, and family issues.

Spiritual wellbeing was also another variable included in the individual characteristics. Based on result, majority of the respondents both male and female claimed that they do not have spiritual well being while only 40% affirmed of attaining spiritual wellbeing. During the interview, most of the respondents conveyed that despite having strong religious beliefs, many of them did get much support from spiritual practices such as going to church regularly since most of them are living in areas far from their churches. Another factor is that they do not have the finances to go to church since the fare is a little expensive due to the distance. Furthermore, masses in the chapels in the different barangays are only held once a month and during special occasions such as fiestas. This correlated with the study conducted by Idler *et al.* (2001) who reported that as the elderlies are nearing death, the frequency of church attendance usually declines but they reported a feeling of stability and religious feeling that strengthens and comforts them.

For community involvement and participation, 28.89% are not involved in any community organization or activities; 57.04% are slightly involved in community

organizations; and only 14.07% are actively involved in community organizations and activities. This implies that most of the elderly do not engage themselves actively in community activities which can be attributed to their declining physical capacity to perform certain tasks. In a study conducted by Cachadinha *et al.* (2011), it was found out that social participation of older persons can be hindered by aging-related physiologic restrictions and other factors related to their social and physical setting. The presence of physical obstacles and hindrances in the elderlies makes it difficult for them to perform the regular activities. The opportunities of the elderlies to socially interact with others are further limited with the absence of shared facilities and resources that provides casual meeting spaces.

Family Characteristics

The following table shows the family characteristics of the elderly respondents. The family characteristics include marital status, family size, monthly income, quality of family relationships and family emotional support.

Table 2. Family Characteristics of the Respondents

Variables	Categories	Male		Female		Total	
Marital Status	Single	6	3.13%	5	2.35%	11	2.72%
	Married	150	78.13%	157	73.71%	307	75.80%
	Divorced	12	6.25%	10	4.69%	22	5.43%
	Widowed	24	12.50%	41	19.25%	65	16.05%
	<i>Total</i>	192	100%	213	100%	405	100%
Family Size	1-3	29	15.10%	40	18.78%	69	17.04%
	4-6	108	56.25%	129	60.56%	237	58.52%
	7-9	54	28.13%	44	20.66%	98	24.20%
	10-11	1	0.52%	0	0	1	0.25%
	<i>Total</i>	192	100%	213	100%	405	100%
Monthly Income Range		P2,000 – P12,000		P2,000 – P12,000		<i>Not Applicable</i>	
Quality of Family Relationships	Adaptive	84	43.75%	82	38.50%	166	40.99%
	Mostly Adaptive	92	47.92%	98	46.01%	190	46.91%
	Limited Adaptive	8	4.17%	21	9.86%	29	7.16%
	Significant Difficulties	8	4.17%	12	5.63%	20	4.94%
	<i>Total</i>	192	100%	213	100%	405	100%
Family Emotional Support	Substantial	101	52.60%	99	46.48%	200	49.38%
	Some Limitations	51	26.56%	59	27.70%	110	27.16%
	Very Limited	34	17.71%	48	22.54%	82	20.25%
	None	6	3.13%	7	3.29%	13	3.21%
	<i>Total</i>	192	100%	213	100%	405	100%

As reflected in the table, majority of the elderly respondents are married and only a few percentages are either single, separated or widowed. These statistics concur with the Philippine Country report presented during the 5th ASEAN and Japan High Level Officials Meeting on Caring Societies last August 2007. As presented in the report, among the elderlies aging 60 years old and above, 60.4% were married, 30% were widowed, 5% were reported single, and 1.2% were either divorced or separated. According to United States Department of Health and Human Services in 2012, the marital status of men and women aging 65 years and above are 72% and 45% respectively based from the US Census Bureau's Current Population Survey, Annual Social and Economic Supplement.

Majority of the elderlies have a family size ranging from 4 to 6 family members. The Philippines Commission on Women (2014) revealed that there was a slight downtrend of the average size of Filipino households from 5.0 persons in 2000 to 4.8 persons in 2007. In the year 1995, households headed by females had an average size of 4 persons while households headed by males had an average of 5.2 persons.

The monthly income range for both male and female respondents varies from 2,000 pesos to 12,000 pesos. This variation can be attributed to such factors as the number of family members directly contributing for the family income as well as the type of income source. The Department of Social Welfare and Development (2007)

reported that 57% of the elderlies were income generating and productive workers in the year 2000. Primary sources of income generating activities in the majority (41%) of the elderlies were farming, forestry work and fishing. The other 10% were laborers and unskilled workers. Elderlies aging 60 and above made up of 13.77% of the total farmers, forestry workers or fishermen, and 6% of the total laborers and unskilled workers. In terms of class, 52.5% of the employed older persons were self-employed or were working in their own family-operated farms or businesses, while 20.65% were self-employed without any paid workers, such as in the National Capital Region. As estimated by the DSWD, in the entire elderly population in the Philippines in 2000, 31.4% fall on the low-income bracket.

As can be seen from the data, the quality of family relationships of most of the respondents is adaptive which means family members generally get along well in spite of occasional conflicts occurring between them. This signifies that most of the elderlies have a healthy relationship with their family members leading to the acquisition of substantial emotional support from each member.

Social Characteristics

The following table reflected the social characteristics of the respondents that include the quality of relationships with neighbors, access to amenities and transportation, and neighborhood safety and concern.

Table 3: Social Characteristics of the Respondents

Variables	Categories	Male		Female		Total	
Quality of Relationships with Neighbors	Adaptive	84	43.75%	80	37.56%	164	40.49%
	Mostly Adaptive	80	41.67%	97	45.54%	177	43.70%
	Limited Adaptive	16	8.33%	27	12.68%	43	10.62%
	Significant Difficulties	12	6.25%	9	4.23%	21	5.19%
	<i>Total</i>	192	100%	213	100%	405	100%
Access to Amenities and Transportation	Yes	162	84.38%	188	88.26%	350	86.42%
	No	30	15.63%	25	11.74%	55	13.58%
	<i>Total</i>	192	100%	213	100%	405	100%
Neighborhood Safety Concern	No Safety	69	35.94%	71	33.33%	140	34.57%
	Mild Safety Concern	109	56.77%	111	52.11%	220	54.32%
	Moderate Safety Concern	13	6.77%	27	12.68%	40	9.88%
	Severe Safety Concern	1	0.52%	4	1.88%	5	1.23%
	<i>Total</i>	192	100%	213	100%	405	100%

As reflected on the table, the elderlies' relationships with their neighbors are mostly adaptive which means that they generally get along with one another. However there are occasional fights or conflicts occurring between them with a certain degree of difficulty in resolving them. This can be attributed to the fact that most elderlies have the tendency not to concede to certain arguments as they believe that being older makes them better experienced in most things.

A greater portion of the respondents (40.49%) generally get along with their neighbors with easily resolved conflicts while only a few have limited adaptive relationships as well as significant difficulties with their neighbors. Results from the study conducted by Greenfield and Reyes (2014) suggested that sympathetic and reassuring relationships with neighbors can promote increased levels of wellbeing among older individuals.

Majority of the respondents have access to

community amenities and transportation which means that the elderly persons have a greater chance of having their physiologic and social needs addressed as they can easily travel from one place to another point of destination should they need certain services. Presence and accessibility of transportation enables the elderlies to reach places with comfort and allows them to socialize and participate in social activities (Cachadinha, Pedro, & Fialho, 2011).

With regards to neighborhood safety concern, majority of the respondents have mild safety concerns which could indicate that their immediate neighborhood predisposes them to some probability of neglect or exposure to unpleasant influences but without the presence of immediate risk.

Life Subjective Well being

The following table shows the subjective wellbeing of the elderly based on the Satisfaction with Life Scale.

Table 4. Subjective Wellbeing of the Respondents

Variables	Categories	Male		Female		Total	
Satisfaction with Life	Extremely Dissatisfied	1	0.52%	1	0.47%	2	0.49%
	Dissatisfied	9	4.69%	15	7.04%	24	5.93%
	Slightly Below Average	50	26.04%	51	23.94%	101	24.94%
	Average Life Satisfaction	88	45.83%	94	44.13%	182	44.94%
	High Score Life Satisfaction	40	20.83%	48	22.54%	88	21.73%
	Very Satisfied	4	2.08%	4	1.88%	8	1.98%
	<i>Total</i>	192	100%	213	100%	405	100%

Based on the gathered data, 44.94% of the respondents both male and female claimed that they have average life satisfaction which implies that these elderlies are mostly satisfied with most areas of their lives but see the need for improvement in each area. Individuals with average life satisfaction would usually make some life changes to advance to a higher level (Diener, 2006).

On the other hand, 24.94% of the respondents stated that their life satisfaction is slightly below average. This signifies that there are certain aspects in their lives having significant concerns or problems. The elderlies who scored high in the Life Satisfaction Scale comprise 21.73% of the population. These indicated that these elderlies are happy and satisfied with their lives and perceive that things are going the way they

want it to be. These elderlies are enjoying life and are mostly fulfilled with the personal, emotional, and social aspects of their lives.

Another 5.93% declared that they are significantly discontented with their lives. This signifies that these elderlies' were not doing very well and that major life changes are necessary. These elderlies are often unable to perform their functions properly since their discontent serves as an interference of their daily life. The elderlies who reported very high satisfaction with their lives consists of 1.98%. These elderlies are very well contented and satisfied with their lives even though they still consider life as imperfect. For elderlies who are very satisfied, life is very enjoyable, and the major domains of life involving personal, emotional and social aspects are going very well.

Only 0.49% of the respondents claimed that they are extremely dissatisfied and unhappy with their current life. This could be attributed to certain negative experiences including loss of a loved one or family member, unemployment, debilitation due to illness,

decline of life threatening physical functioning or the presence of a chronic problem.

The table below reflects the mean for each item of the Satisfaction with Life Scale.

Table 5. Weighted Mean for Satisfaction with Life Scale

Items	Mean	Descriptive Rating
1. In most ways, my life is close to my ideal.	4.04	Average
2. The conditions of my life are excellent.	3.86	Slightly Below Average
3. I am satisfied with life.	4.41	Average
4. So far, I have gotten the important things I want in life.	4.28	Average
5. If I could live my life over, I would change almost nothing.	4.58	Average
Weighted Mean	4.23	Average
Average SWLS Score	21.18	Average

<i>Weighted Mean</i>	<i>SWLS Scoring System</i>	<i>Descriptive Rating</i>
6:01-7:00 =	30-35 =	Very High (Highly satisfied)
5:01-6:00 =	25-29 =	High
4:01-5:00 =	20-24 =	Average
3:01-4:00 =	15-19 =	Slightly Below Average in Life Satisfaction
2:01-3:00 =	10-14 =	Dissatisfied
1:00-2:00 =	05-09 =	Extremely Dissatisfied

Based on the data presented, the respondents have an average SWLS score of 21.18 and a weighted mean of 4.23 which falls under average life satisfaction based on the SWLS scoring system. This means that the general elderly population in Sagbayan is more or less satisfied with the different domains of their lives, but there are some areas where they would like some improvement. Brittler et al., (2013) found out that adults in retirement age are satisfied with their life

when they can control things which are important to them and can continue to set new professional goals for themselves.

Predictors

The following tables provide the summary of results of the statistical treatment of the dependent variable and predictors. Results were obtained utilizing multiple regressions.

Table 6. Predictors of Social Wellbeing

Model		Coefficients ^a						
		Unstandardized Coefficients		Standardized Coefficients	t	Significance	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
(Constant)	20.568	2.283		9.007	0.000			
Gender	-1.003	0.280	-0.105	-3.589	0.102	.671	1.490	
Age	-0.100	0.027	-0.155	-3.753	0.000	.334	2.990	
EducQ	-0.731	0.401	-0.103	-1.826	0.069	.180	5.557	
HealthStatus	0.728	0.335	0.142	2.171	0.031	.134	7.484	
FinancialSupport	0.067	0.391	0.011	0.170	0.865	.144	6.944	
StressScale	2.312	0.273	0.415	8.458	0.000	.238	4.207	
Spiritual	0.245	0.451	0.025	0.543	0.588	.268	3.728	
CommunityPart	1.383	0.426	0.185	3.246	0.001	.177	5.660	
MaritalStatus	-0.026	0.238	-0.005	-0.108	0.914	.314	3.183	
FamilySize	0.020	0.067	0.008	0.295	0.769	.875	1.143	
Income	0.000	0.000	-0.131	-3.865	0.000	.496	2.016	
FamRela	0.024	0.479	0.004	0.050	0.960	.092	10.889	
EmotionalSup	0.367	0.350	0.067	1.049	0.295	.138	7.249	
RelNeighbors	0.430	0.395	0.074	1.089	0.277	.123	8.137	
Amenities	-1.043	0.620	-0.075	-1.682	0.093	.290	3.449	
Safety	1.371	0.454	0.191	3.021	0.003	0.143	6.998	

a. Dependent Variable: ScoreWellBeing

As reflected on the table above, the significant predictors of subjective wellbeing include age, health status, perceived stress, community participation, family income, and neighborhood safety. Based on the result, factors such as gender, educational attainment, financial support, spiritual wellbeing, marital status, family size, emotional support, relationship with neighbors, and access to transportation and amenities are not significant in predicting the subjective wellbeing of the elderly.

Aging individuals tend to achieve a certain level of maturity and security on the different domains or aspects of their lives as they grow older and this partly contributes to subjective wellbeing. Older individuals have also mastered their strengths and weaknesses enabling them to cope well with various situations. Elderlies have more realistic expectations and are more contented hence they have higher levels of subjective wellbeing. According to Diener and colleagues (1999), subjective wellbeing increases with age peaking after retirement in the 70s decade. In longitudinal and cross-sectional studies old age is correlated with lower levels of negative affect and stable levels of positive affect (Charles & Carstensen, 2008). Discrepancy theory

stated that life satisfaction is maximized when the discrepancy between one's goals and achievements is minimized (George, 2010). This discrepancy is much lower in older adults. However, it is unknown if the lower levels of discrepancy are due to having achieved more realistic expectations among older adults.

Another explanation of the processes underlying the general increase in subjective wellbeing among older adults is the role of social comparison (George, 2010). According to this approach, we make judgments about our lives by comparing our status with others around us. An older adult in relatively good health with a living spouse may judge themselves to have attained an increased level of subjective wellbeing when thinking about social image and the lives of some of their less-healthy peers.

Health status can also affect subjective wellbeing in various ways most especially in the elderlies' level of functioning. When the elderlies' health status is not compromised, they can perform activities of daily living on their own without dependence and assistance, and they can also fulfill their roles in the family and the community leading to improved levels of wellbeing. There are multiple ways to measure health. However,

most objective measures of health, such as a physician's observations and diagnoses, are not as strongly correlated with wellbeing as more subjective measures, such as a self-report of overall health status (Diener *et al.*, 1999). This may be because objective measures of health are standardized and do not take the individual or the age of the individual into consideration. Some individuals are more impacted at different ages by certain conditions than others, and different illnesses cause different amounts of discomfort (e.g. pain) and disruption to daily life.

The number of older adults with functional limitations is increasing, and they are living longer (Greenfield & Marks, 2007). There are many physiological functions that deteriorate with age. On average as people age they cannot metabolize carbohydrates, they have less bone density, their level of cognitive functionality decreases, and it becomes more difficult for them to perform daily. This is referred to as usual aging. In contrast, they defined successful aging as being characterized by a below average level of physiological deterioration and above average levels of autonomy and functionality. A person who is aging successfully will be at a low risk for disease, will have a high level of mobility and cognitive function, and will be engaged with life. Also, older adults who have fewer functional limitations and feel more in control of their lives score higher on measures of life satisfaction (Rowe & Kahn, 1987).

Mollaoglu *et al.* (2010) found that self-rated health was a crucial determinant of life satisfaction among older adults. A reduction in life satisfaction among elderlies is also attributable to self-rated health (Gwozdz & Sousa-Poza, 2009). Self-reported health is important to look at because the way people perceive their health is more important in determining their subjective wellbeing than their actual health. It also enables researchers to account for individual disparities in the impact of chronic illnesses and functional limitations.

Stress can also affect the subjective wellbeing of the elderly. High levels of stress are directly linked to reduced levels of wellbeing. This is because higher levels of stress increase the likelihood of interference in the elderlies' general health thus increasing the susceptibility to compromised health and illness leading to inability to function well.

Social relationships and social participation can have a positive effect on subjective wellbeing.

Elderlies who are actively participating in the community also have higher levels of subjective wellbeing. This can be attributed to the fact that older individuals who involve themselves in community activities feel more connected with each other. For example, Greenfield and Marks (2007) found that middle-aged and older men who willingly participate in some form of a group with a strong social component are less likely to have increased levels of depression after developing functional limitations. However, this finding does not hold true for women. Adequate amount of social support is also correlated with a lower risk of mortality (Rowe & Kahn, 1987).

Another predictor that has a significant impact on subjective wellbeing is family income. Elderlies who can afford better services, and buy ample amount of food as well as other basic needs tend to be happier than those who have financial restrictions. According to various studies, there is a significant positive correlation between income and subjective wellbeing across countries over time (Deaton, 2008; Stevenson and Wolfers, 2008; Sacks, Stevenson and Wolfers, 2012).

Lastly, neighborhood safety is also an important predictor of subjective wellbeing as it influences the elderlies feeling of security and sense of freedom from danger. This has been shown in various studies exploring the link between experience of abuse and maltreatment and subjective wellbeing at the individual level as well as self-rated perceptions of safety. For instance, a certain study revealed that individuals dwelling in an unsafe or deprived area have lower levels of life satisfaction (Dolan, Peasgood and White, 2008).

Table 7. Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics					Durbin-Watson
					R Square Change	F Change	df1	df2	Sig. F Change	
1	0.882 ^a	0.778	0.769	2.30118	0.778	85.144	16	388	0.000	1.745

a. Predictors: (Constant), Safety, Age, Gender, FamilySize, Income, Amenities, Spiritual, MaritalStatus, StressScale, FinancialSupport, EducQ, CommunityPart, EmotionalSup, RelNeighbors, HealthStatus, FamRelab.

b. Dependent Variable: ScoreWellBeing

This implies that the identified factors such as age, health status, perceived stress, community participation, family income, and neighborhood safety had 77.8% influence on the elderly's subjective wellbeing. Furthermore, this signifies that 22.2% can be explained by other factors other than the ones included in the study such as leisure and recreation, exercise, cultural affiliation, fulfillment in one's job, personality and events affecting an individual's life.

Diseases and Occurrence

The most common diseases experienced by the elderly as per occurrence based on the survey conducted are upper respiratory tract infection, hypertension, generalized muscle pains, arthritis, visual problems, asthma, stroke, migraine headache, diabetes mellitus, and gastric ulcer. These findings coincide with the Department of Health's ten leading causes of morbidity which include acute respiratory infection, acute lower respiratory tract infection and pneumonia, bronchitis/bronchiolitis, hypertension, acute watery diarrhea, influenza, urinary tract infection, respiratory tuberculosis, injuries and diseases of the heart (Ballescas, 2014).

Cho and colleagues (2011) asserted that physiologic health status is the most commonly used index to evaluate the well being of individuals. The significance of physical health as a factor influencing wellbeing has been documented in a number of studies (Cho et al., 2011), which revealed that physical health concerns were the most significant cause of life strain among elderly, and that physical health status was determinant of life satisfaction and psychological distress among elderly individuals residing in rural areas. Physiologic limitations resulting from recurrent illnesses and inability to perform activities of daily living resulted in psychosomatic and emotional distress symptoms. Cho (2011) also cited that poor health was an important component correlated with lower levels of morale among elderly individuals.

A research conducted by Kendig *et al.* (2000) revealed that physical illness and pain greatly impact an individual's wellbeing as they cause activity limitations and dependency when it comes to activities of daily living. In another study conducted by Steptoe and colleagues (2014), it was found out that physical illness could be a determinant to impaired subjective wellbeing. Many individuals show increases in

depressive symptoms after diagnoses of diabetes, coronary heart disease, stroke, some cancers, and chronic kidney disease. Furthermore, on another study conducted by Throop (2011), it was found out that functional limitations caused by different illnesses during old age is linked with reduced levels of subjective wellbeing.

CONCLUSION

The study revealed that the mean level of subjective wellbeing among the elderly in Bohol, Philippines is on the average level of life satisfaction which indicates that they are generally satisfied with the different aspects of their lives but there are certain domains that they would very much like to improve. The significant predictive variables for the elderly's subjective wellbeing include age, health status, perceived stress, community participation, family income, and neighborhood safety. Furthermore, it was found out in the study that most common medical conditions affecting the subjective wellbeing of the respondents are upper respiratory tract infection, generalized muscle pains, arthritis, and visual problems or disturbances.

RECOMMENDATIONS

From the conclusions made, the researcher recommends the following:

1. Programs and policies should be developed by responsible agencies such as OSCA to maximize and enhance the significant factors identified in this study to further improve the subjective wellbeing of the elderly.
2. Further research should be conducted to determine what other factors influence the subjective wellbeing of the elderly.
3. Review of the LGU development plans with respect to the national and international standards on elderly welfare and the translation of these standards in the local level.
4. The Department of Health should develop an action plan on the prevention of common diseases affecting the elderly so as to maintain their health status and thus enhance their subjective wellbeing.
5. The above recommendation should be part of the larger initiative to integrate concerns related to healthy aging in the Local Government Unit and national development plans and programmes.

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