

Predictors of Subjective Well Being among Community Residing Elders in Ethiopian Sample

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Abstract

This study aimed to assess the subjective well-being and perceived adequacy of social support of the elderly. It is a cross-sectional survey that was conducted with a total of 1789 randomly selected elderly (aged 60 and over). Data were collected by interview rating questionnaire system. Concerning levels of components of subjective well-being, the study revealed that more than half the participants' elders scored low levels of life satisfaction, positive, and high level of negative affect. Then, it is concluded that the level of SWB of the elderly low. The independent t-test results indicated no significant difference between male and female elders concerning life satisfaction, positive affect, support from friends, and significant others' support. However, there was a gender difference in the elderly's perceived adequacy of social support, negative affect, total Subjective well-being, and support from families. Above all, friends' support had the highest predictive power of subjective well-being than other predictive factors. To promote the healthy subjective well-being of the elderly, responsible organizations should establish different programs and activities that enhance the elderly quality of life and promote good social support. Finally, this research's findings only paint part of the picture, so in the future, an in-depth research inquiry should be conducted on this very primary issue that may influence the subjective well-being of the elderly by incorporating other variables.

Keywords: Subjective Well-Being, Life Satisfaction, Positive Affect, Negative Affect, Social Support, Elderly

1. Introduction

Perhaps one of the most notable demographic developments in the modern era is the older population's progressive demographic aging. In virtually all countries, the most elderly of the older generation is growing faster than its younger segment. According to Help age Internationalm (2004), the proportion of one to ten persons is 60 years old and above, while in 2050 this rate will be one to five, and finally, in 2150, it will be one to three individuals (Kibret & Tareke, 2017a).

The later years in the human life cycle are usually characterized by important life satisfaction and physical changes that may reshape a person's way of living (Kibret & Tareke, 2017a). With increasing age, the relative significance of psychological health and life satisfaction will change so that elders will have significantly different relationships among subjective well-being components more than the younger participants (Ed Diener & Chan, 2011). This effect will be more pronounced for those elderly in each of the cohorts as they use these resources to maintain optimal levels of functioning.

For a century, many scientists have been studied what contributes to the elderly subjective well-being? Some have suggested that subjective well-being/ life satisfaction stems from good food and fine wine, while others have postulated that it is a function of youth (Ryff & Keyes, 1995; Ryff & Singer, 2008; Kibret & Tareke, 2017b). Moreover, other previous studies have postulated subjective well-being due to socio-demographic characteristics, significant income, physical health status (Ed Diener, 2000; DE SOUZA et al., 2018), and level of social support and social resources (Wang, 2016).

Hedonic well-being is often conceptualized as three critical aspects of subjective well-being: life satisfaction, positive and negative affect; these three are known collectively as *hedonic wellbeing* (Ed Diener et al., 1999). Research on subjective well-being has a long tradition, but one rooted in ideas of the satisfaction, happiness, and pleasure of human appetites (Ryff & Singer, 2008). The ancient Greeks (e.g., Epicurus) and subsequent philosophies of Hobbes and Bentham explained hedonism's essentials (Ryan & Deci, 2001). Nowadays, hedonic psychology is defined as the scientific study of what makes experiences and life pleasant and unpleasant (Newman et al., 2014). Subjective well-being concerns whether people like their lives or not (Kashdan & Steger, 2007). Satisfaction with one's life implies the fulfillment of one's wants and needs for one's life or acceptance of one's life circumstances as a whole (Keng et al., 2004). Because it is inherently an evaluation, life satisfaction judgments have a large cognitive component (E. Diener, 2009).

A numerous psychological study has explored the sources of people's satisfaction in life, include one's overall wealth, health, whether one is single or married, male or female, or young or old (Keng et al., 2004). Regarding socioeconomic standing and life satisfaction, wealthy people are consistently found to be happier than more impoverished people, but the effects are small (Ed Diener, 2009a).

Besides, the relation between a nation's wealth and average life satisfaction levels is positive and healthy (Deiner, 2009). Nonetheless, research both within and between countries has clarified that income increases are not associated with increases in well-being (Ed Diener, 2009a), suggesting that expectations, goals, and comparison processes influence subjective well-being.

In the last decades, extensive empirical research efforts have been directed at clarifying the degree of stability and identifying relevant predictors of level and change in life satisfaction across the lifespan (Steger & Kashdan, 2007; Berg, 2008). Early theories about life satisfaction in the elderly are divided along two major lines.

One approach is *activity theory*, which holds that older people have the same needs as middle-aged people except for the inevitable biological and health changes that accompany the aging process. Successfully aging persons do not want decreased interaction. They stay active and substitute less strenuous activities for others that are lost (Bollain, 2017).

In contrast to activity theory, the *disengagement theory*, which postulates that older people desire decreased interactions. More older people become increasingly preoccupied with the self and decreasingly invested in the environment's persons and objects. Within this framework, successfully aging older persons reach a new equilibrium with greater psychological distance, altered types of relationships, and decreased social interactions (Havighurst, 1968 as cited in Bollain, 2017)). In a review of activity and disengagement theories, Havighurst (1968) concluded that research data had failed to support either of these approaches. Most have shown that neither view altogether accounts for many known facts about the elderly. Data from the Kansas City Studies of Adult life (1961-1965) indicated an overall decrease in engagement in common social roles related to increasing age. But on the whole, those who were most active at older generations were happier (Bollain, 2017). These results are supported by (Ed Diener & Chan, 2011); DE SOUZA et al., 2018), who concluded from an extensive empirical work that older persons who are the most active seem to be the happiest (When happiness is measured in terms of life satisfaction, morale, self-esteem, etc.).

Based on the literature surveyed, it seemed that much research about subjective well-being in old age in general and life satisfaction, in particular, was done from a positivistic and

empirical point of view. In the present study, participants are viewed as individuals with their unique perceptions of aging. Individual differences in the judgments of life satisfaction in individual differences to adapt to the developmental and environmental changes resulting from aging, focus on the present study. The two critical concepts, social support, and subjective well-being, have been selected for investigation for several reasons.

Firstly, the definition and measurement of each of these concepts are sound. Subjective wellbeing incorporates the essential concepts and measures of life satisfaction, positive and negative affect. Furthermore, the definition and measurement of subjective well-being has been soundly developed by E. Diener (2009) and incorporates the notion that judgments of satisfaction with life domains are weighted by the importance of that particular life domain to the individual. On the other hand, the social network received and perceived support is a well-known social support dimension that has long been upheld in the literature in both theory and measurement.

Secondly, the definition and measurement of these three constructs allow their relationships to be explored without running the risk of including constructs that are, in essence, identifying the same phenomena. Hence, subjective well-being and the Perceived adequacy of social support processes associated with it are ideal variables for the current investigation, as they are likely to be relatively free from confounding overlapping variance.

Finally, there is concrete empirical evidence to suggest that the relationships between these two concepts are meaningful to the maintenance of a good and meaningful life. Perceived adequacy of social support has long been established to predict constructs of subjective well-being. Given the strength of the relationship between demographic variables, social support, and subjective well-being, the researcher proposes the later framework to be more accurate.

2. Objective

This study intended to assess the status of the subjective well-being, demographic factors, and perceived adequacy of social support of the elderly. Specifically, the research was attempted:

1. To assess the status of the subjective well-being of the elderly population;

2. To examine the Correlation of social Support (social network, received support, and perceived support) and the subjective well-being (total and component) of the elderly
3. To examine the independent contribution of demographic variables (income, marital status, sex, educational status) and social support (social network, received support, and perceived support) in predicting the subjective well-being of the elderly;

3. Theoretical and conceptual framework

3.1. Theoretical and conceptual framework of the study

Subjective well-being is not something superficial or imaginary thing. Subjective well-being is defined as a person's cognitive and affective evaluations of his or her life, including emotional reactions to events and cognitive judgments of satisfaction and fulfillment (Snyder & Lopez, 2002). People's SWB can be measured through different assessment devices. The standard method of measuring subjective well-being is through self-reported questionnaires, memory measures, behavioral observation, and interviews (Ed Diener, 2009b). Moreover, there are biological measures of SWB in a laboratory. Some of them are 1. frontal brain asymmetry; 2. facial electromyography; 3. saliva cortisol level; 4. eye blink startle response (Deiner, 2009). Furthermore, there are two methods of measuring subjective well-being. These are (Eryilmaz, 2010):

1. Positive affect, negative affect, and life satisfaction scales are used differently.
2. Positive affect, negative affect, and life satisfaction scales are used together, and then the total point of SWB is computed using the following formula.

Subjective well-being = (life satisfaction + positive affect) - negative affect.

The definition and measurement of these three constructs allow their relationships to be explored without running the risk of including constructs that are, in essence, identifying the same phenomena. Hence, subjective well-being and the Perceived adequacy of social support processes associated with it are ideal variables for the current investigation, as they are likely to be relatively free from confounding overlapping variance. In this study, participants' levels of SWB were assessed by both methods differently and together.

3.2. Components of subjective well-being

Subjective well-being is composed of two components: the affective and cognitive components. Much of the aging literature shows that older adults illustrate better emotion regulation than younger adults (Lawton et al., 1992; Fischer, 2009) and report less negative affect than younger adults and similar positive affect levels (e.g., Mather & Carstensen, 2005). Furthermore, a consistent finding in cross-cultural research on SWB is that people from Asian cultures tend to report lower life satisfaction levels and positive affect than North Americans (Ed Diener, 2009a). To better understand how age and culture differentially influence subjective well-being, the current study examined the subjective well-being of younger and older adults in Chinese culture and compared it to younger and older adults in North American culture (Ed Diener, 2009a).

Perhaps one of the most remarkable demographic developments in modern times is the older population's progressive demographic aging. In virtually all countries, the most elderly of the older generation is growing faster than its younger segment. According to Hel page Internationalm(2004), the proportion of one to ten persons is 60 years old and above, while in 2050 this rate will be one to five and finally in 2150, it will be one to three individuals (Kibret & Tareke, 2017a). Ed Diener's model of SWB captures a broad array of conceptions of self-evaluation. Several of the dimensions associated with SWB closely align with established developmental outcomes with the elderly population. Thus, subjective well-being is a broad concept that includes experiencing pleasant emotions, low levels of negative moods, and high life satisfaction (Snyder & Lopez, 2002). Figure 1 (below) serves to place the concept of SWB within the broader framework of various well-being concepts. Notably, the well-being construct has been used in varying settings in which the sub-categories may differ. Thus, the proposed figure represents by no means a complete definition of the construct.



Figure 1: The Concept of SWB in a Heuristic Well-Being Framework: source: the author(s)

3.3. Current Positive Psychological thinking and Subjective Well-Being

According to (M. Seligman, 2010; M. E. P. Seligman et al., 2014), Positive psychology is the scientific interest in psychological phenomena ranging from the most negative to the most

positive. It is a timely response to what has been described as a fascination with pathology and negative phenomena. Social psychologists in general and psychologists, in particular, have primarily focused on individual deficiencies and human pathology. In contrast, positive psychologists state that it is due time to include positive phenomena. While the study of pathology has facilitated considerable progress in finding treatment strategies and helping people with psychological illness, it has also produced a deficit bias to improve their health.

Positive psychology is vital to enhance adolescents' and elders' SWB because of positive psychology (Deiner, 2009; Ed Diener, 2009a; Ed Diener, 2009b).

- Help young people to cope with the challenges of the elderly successfully.
- Preventing mental health problems and promote good mental health at old age.
- Help older adults improve social skills and living that can have a lasting positive effect on their lives.

3.4.Social Support and Subjective Well Being of the Elderly

Social Support can be considered as the type and frequency of social contacts. It is also the degree to which a person perceives that certain support types (e.g., emotional, tangible assistance) are available. Both social support types have been directly linked to life satisfaction and quality of life (Haller & Hadler, 2006). It is expected that the more social support, the easier adjustment to the environmental situation will be. Therefore, it was hypothesized that: Social Support will predict the subjective well-being of the elderly. The higher the social support available to older people, the better their quality of life (Dykstra, 2015). Social Support is hardly a uniform or the finished concept itself (McNicholas, 2002). Social Support is a multidimensional construct that has been conceptualized and measured in a variety of ways. Most measures of support are three categories:

3.4.1. Social Network

Social network characterized that assess the degree to which a person is socially integrated. Social integration is understood as being embedded in a social network, for which we can draw upon various indicators, such as marital status, number of relatives and friends, as well as frequency and form of contact to them. The social network is characterized by morphological features (size, density, accessibility, centrality, cluster, sectors) and relational

features (strength of the bond, frequency of contact, latent vs. current relationships, duration, reciprocity, egocentricity vs. altruism, accessibility (Dykstra, 2015).

3.4.2. Received Support

It measures that indicate what a person has received or reported to have received (Dykstra, 2015). In the case of received support, we are concerned with how often and how effectively helpful actions are performed, taking into account both the observed events and the subjective assessment (Ermis-Demirtas et al., 2018)

3.4.3. Perceived Support

The perceived support measures capture an individual's beliefs about support availability (Dykstra, 2015). Measures of perceived Support are the focus of this study. When we examine social support in the narrow sense, the qualitative and functional aspects of relationships are core.

3.4.4. Perceived Adequacy of Social Support

Perceived social support is the individual's belief that one or more persons give them information that they are loved, cared for, esteemed, and valued (McNicholas, 2002). It is believed that social support enhances subjective wellbeing through a variety of positive influences that include fostering a sense of meaning in life and the promotion of health. Conversely, a lack of social support has been linked to a loss of well-being and even psychopathology (Turner & Marino, 2016).

4. Methods

This part presents the study's location, target population, sampling techniques employed, and instruments used for data collection, and procedures followed (construction, validation, administration, scoring, and analysis).

4.1. Design of the study

This study aimed to examine the relative influence of social support on the elderly's subjective well-being: life satisfaction, positive affect, negative affect, and total subjective well-being. Total subjective well-being, life satisfaction, positive and negative affect served as the criterion variables/dependent variables, and social support served as the predictor variables /independent variables. Thus to achieve the stated objectives, quantitative approaches to data

collection have been used.

4.2. Study Site

Data for the study was gathered from Dessie Town, south Wollo zone, and Oromia Zone. The towns are located in Amhara Regional State, in the North East of Addis Ababa, Ethiopia.

4.3. Population and Sampling

This study's target population is community-residing elders in Dessie administration city, south wollo zone, and Oromia zone aged 60 years and older. Dessie Town has sixteen (16) Kebeles, south wollo has 21 woredas, and Oromia Zone has seven woredas with a total population of 12,497 (6,080 males and 6,417 females), 18,965 (9,978 males and 8,987 females), 13,648 (6,636 males and 7,012 females) elders respectively (Central Statistical Agency [Ethiopia] & ICF International, 2011). Descriptive statistics (i.e., frequencies, means, & standard deviations) were used to summarize the participants' demographic characteristics. The economic activities of the Towns are highly dependent on trade and agriculture. There are Orthodox Christians, Muslims, Catholics, and Protestants in the Towns.

Proportionate stratified random sampling was utilized to select woredas and sub-cities of sample subjects in the study. Initially, the Dessie administration city has 16 kebeles with ten sub-cities. Three sub-cities were taken randomly. In addition to this South wollo zone has 21 woredas; of these, seven woredas should be taken as a sample, and the Oromia zone has seven woredas, and of these, three woredas are taken as a sample of the study. A random sample of three sub-cities and ten woredas were considered in the study using a lottery method from each of these three strata. Accordingly, the sampled sub-cities from Dessie Town (menafesha, Banibuha, and Arada sub-cities) were taken. From South Wollo Zone, Ambsel Woreda, Woreielu, Saint, Werebabo, Kelala, Mekidela, Kalu, and Delanta), and Oromia Zone (Senbetie Woreda, Bati Woreda, and Kemisie Town) were taken. Then the researcher visited each of the Sub-cities and woredas offices to secure information about the elderly. The researcher was provided with documents to help him in this regard. The total numbers of elders registered in the three study areas found are 17,898 (8,969 males and 8,929 females). From this complete list of elders, 1,789 (897 males and 892 females) were drawn using the

proportionate stratified sampling. All 1789 respondents completed the data and were analyzed for this study giving a response rate of 100%. This sample size is almost 10% of the population. According to Strang (2015), it is advisable to take 10-30% of the survey design population.

4.4. Instruments

4.4.1. Measures on Social Support(MSPSS)

The Multidimensional Scale of Perceived Social Support (Zimet et al., 1988) is a twelve-item scale, rated on a 7-point Likert scale, ranging from very strongly disagree (1) to Strongly agree (7). It measures social support from three sources: family, friends, and a particular person, measured on three subscales: Significant Others (SO) (Items 9, 10, 11, and 12), Family (FA) (Items 1, 2, 3, and 4) and Friends (FR) (Items 5, 6, 7, and 8). The total social support is the sum of the scores from twelve items. The higher the sum of the twelve items indicates, the higher the level of social support. The MSPSS does not take long to complete, and since it does not require advanced level reading skills, it is suitable for many populations of different ages and different education levels (Zimet et al., 1988). In their initial study with university students, Zimet and his colleagues reported a Cronbach alpha level of .88 for the scale. They also checked the scale's test-retest reliability and reported this as .85 (Zimet et al., 1988). For this study, the multidimensional perceived adequacy of social support-revised (MSPASS-R) was adapted and used. In the present study, each subscale's reliability was also high, i.e., $\alpha = 0.87$ for the family subscale, $\alpha = 0.84$ for the friend subscale, and $\alpha = 0.79$ for the significant others subscale.

4.4.2. Global Life Satisfaction Scale

The global life Satisfaction Scale is a five-item scale developed by (Ed Diener et al., 1985). The global life satisfaction scores were calculated by summing all the items. The elders' life satisfaction scores ranged from 7 to 35. Thus, it means a minimum score of 7 and a maximum score of 35. The following cuts off points were used to classify the elderly population under each level: then the cutoffs below instead should be: 6-7, 5-6, 4-5, 3-4, 2-3, 1-2. Thus, 31 - 35 extremely satisfied 26 - 30 Satisfied, 21 - 25 slightly satisfied, 20 Neutral, 15 - 19 slightly dissatisfied, 10 - 14 Dissatisfied, and 5 - 9 extremely dissatisfied. Then, the total scores of the items are categorized into three levels –low (19-5 score), moderate (20) score) and high (35-21) to identify the levels of elders' life satisfaction.

4.4.3. Positive and negative affect scale

The affective dimension was also measured with two factors: (1) positive affect and (2) negative affect by the Watson et al. (1988) Positive and Negative Affect scale. The positive and negative affect scale is a 20-item questionnaire; ten Positive affect and negative affect items were used to assess elderly level of positive and negative feelings (Watson & Tellegen, 1985). Participants rated themselves on a five-point Likert scale ranging from 1= none of the time to 5=all of the time. Research also has shown that the PANAS scales are a viable measure for both younger and older adults (Watson et al., 1988).

The positive and negative affect scale is a 10-item scale, each with a minimum score of 10 and a maximum score of 50. Based on the scales of scoring, the next cuts off points were used to classify the elders under each level: 4-5, 3-4, 2-3, and 1-2. Therefore 40-50-high score, 30-40-average score, 20-30-slightly below average, 10-20-low score. Then, the total scores of the items are categorized into three levels –low (10-29score), moderate (30-39 score), and high (40-50) to identify the levels of elders' PA and NA(Watson et al., 1988).

4.5.Procedures

Initially, the questionnaires' format was reviewed by experienced senior researchers who had long experience in research. The next step of the study was contacting the sub-cities and woreda's social-security affairs offices. A discussion was then held about the research objective and how to get respondents and supplementary information for the study by creating a good collaboration with them.

4.6.Validation

4.6.1. Expert Judgments

The questionnaire format was reviewed by two elders who had long experience in research and Dessie Teachers Education College instant through their professional researcher to clarify and usability of the forms to older adults. Moreover, the face validity of all scales, i.e., the format, content, and coverage, were comments by two instructors from our University (currently in the Institute of Teachers Education & Behavioral Sciences). Based on the feedback given by the judges, the researcher improved the items.

4.6.2. Language Translation

The adapted instruments were translated from English into Amharic by one language expert in Amharic who is believed by the researcher that he has long years of experience in translation, then back-translated into English by one linguistic Ph.D. instructor in Wollo University. There was no discrepancy found.

4.6.3. Pilot Testing

The pilot test aims to solve ambiguity (clarity, language structure problems) to check the instrument's validity, reliability, and feasibility. In the present study, the Amharic versions of the instruments were administered to systematically selected 60(26 male and 34 female) elders from the Banbuwha sub-city of Dessie Town. These subjects were excluded from the study. The reliability of constructs of the Amharic versions was established to measure the items' homogeneity for the total and dimension subscales using Cronbach's Alpha. Cronbach's Alpha coefficients were computed using SPSS version 25. Thus, the obtained Cronbach alpha coefficients result of the present pilot test, and the questionnaire's previously reported reliability is displayed in the following table.

Table 1: Summary of Reliability Coefficient of Instrument of the Pilot and Previous Studies of the Scales

No.	Measure of scales	Cronbach's Alpha of the previous study	Cronbach's Alpha of present pilot study
1	Subjective well being	.87	.81
2	Life satisfaction	.84	.91
3	Positive affect	.90	.92
4	Negative affect	.87	.83
5	Perceived Adequacy of Family	.87	.98
	Social Support	.85	.78
	Friends	.91	.84
	Significance of others		
	Total	.99	.87

The acceptable level of reliability depends on the research objective, age, sex of participants, and the type of appropriate behavior. Reliability coefficients as low as .55 for scales measuring attitude, evaluation, interest, intention about a particular issue and personality and .70 for scales measuring aptitude or ability can be acceptable (Cronbach,

2004). Therefore, the pilot test results in the above indicate that all scales are acceptable to research participants' evaluation, emotions, attitude, and perception of the concerned issues. Therefore, the researcher planned to use all the scales to collect data for the main study.

5. Research Results

5.1. Demographic Characteristics of Elders (N=1789)

Table 2: Number and Percentage of the Elderly Classified by General Characteristics (N=1789)

No.	Variables	Categories	No.	%
1	Sex	Male	897	50.1
		Female	892	49.9
	Age (years)	60-69	544	30.4
		70-79	692	38.7
		80-89	358	20.0
		<90	195	10.9
2	Educational Level	Illiterate	1168	65.3
		Elementary School Completed	291	16.3
		High School Completed	330	18.4
3	Marital Status	Married	938	52.1
		Never Married	24	1.3
		Widowed	91	5.1
		Divorced	736	41.1
4	Monthly Income (in birr)	below 500	885	49.5
		500-1000	886	49.5
		1100-1500	9	.5
		1600-2100	9	.5

As depicted in Table 2 above, a total of 1789 elders were involved in the final analysis of the data. The age of respondents involved in the study ranged from 60 to 90 years. Out of this, 544 (30.4 %) of them were between 60 and 69 years old, 692 (38.7 percent) were between 70- and 79 years old, and 358 (20 %) were between 80-89 and 195 (10.9 %) were over 90 years old. Concerning educational level, of the total 1789 elders, 1168 (65.3 %) were illiterate, 291 (16.3 %) had received elementary school education, and 330 (18.4 %) of respondents had a high school education. Besides, 938(52.1 %) were married, 24 (1.3 %) were unmarried, 91(5.1 %) were widow, and 736 (41.1 %) were divorced. The results showed that all of the elderly had less than 1000 birr per month (see Table 2).

5.2. The Elderly Status of Subjective Well-Being

There are two methods of measuring subjective well-being. These are (Eryilmaz, 2010):

1. Positive affect, negative affect, and Life satisfaction scales are used differently.
2. Positive affect, negative affect, and Life satisfaction scales are used together, and then the total point of SWB is computed using the following formula.

$$\text{Subjective well-being} = (\text{life satisfaction} + \text{positive affect}) - \text{negative affect}.$$

In this study, both methods were used to assess participants' status of SWB (positive affect, negative affect, and life satisfaction scales) differently and together.

To determine the SWB (components & total) level of the elderly population, percentage values, and frequent counts are computed. The results are presented in Table 3 below.

Table 3: Summary results of life satisfaction level, Positive Affect, and Negative Affect of the Elderly participants (N=1789)

Variables	Sex	Low		Moderate		High	
		Frequencies	%	Frequencies	%	Frequencies	%
Life satisfaction	Male	618	34.54	248	13.86	31	1.71
	Female	598	33.42	244	13.64	50	2.79
	Total	1, 216	67.96	492	27.50	81	4.52
Positive Affect	Male	884	49.41	10	0.56	3	0.17
	Female	876	49.07	11	0.615	3	0.17
	Total	1760	98.34	21	1.174	6	0.34
Negative Affect	Male	2	0.12	7	0.40	888	49.63
	Female	8	0.44	13	0.72	871	48.68
	Total	10	0.56	20	1.12	1759	98.32

Based on the results indicated in Table 3 above, about 81 (4.52%) of the participants scored high, 492 (27.50%) moderate, and 1216 (68.00%) low levels of life satisfaction. More than half the participants (68%) of elders scored low levels of life satisfaction. This means most elderly experienced low life satisfaction. Around 31 (1.71%) of male elders and 50 (2.79%) of female scored high, 248 (13.86%) of male elderly and 244 (13.64%) of female elders moderate and 618 (34.54%) of male elders, and 598 (33.42%) of the female elders scored the low level of life satisfaction. Male elderly achieved relatively higher levels of life satisfaction

than females. This result conforms with Qudsyi et al.'s (2020) 's research, which found that life satisfaction gradually decreased when age increased (See Table 3).

Regarding the Positive Affect, about 6(0.34%) of the elders scored high, 23(1.174%) moderate, and 1760(98.34%) low level of positive affect. This implied that 98.34% of the participants' loss of such significant life-like characteristics feels recurrent happiness, cheerful, full of life, in good spirits, calm and peaceful. Around 3(0.17%) of males and 3 (0.17%) of the female elderly scored high positive affect, 10 (0.56%) of the males and 11 (0.615%) of the females scored the moderate level of PA and 884 (49.41%) of the males, and 878 (49.07%) of the female elders scored the low level of PA (See Table 3).

Finally, 10 (0.56%) of the elders scored low, 20 (1.12%) moderate, and 1759 (98.32%) high level of negative affect. This implied that 98.32% of the participant's loss of such significant life characteristics feels recurrent happiness, cheerful, full of life, good spirits, calm, and peace. Around 888 (49.63%) of males and 871 (48.68%) of the female elderly scored high negative affect, 7 (0.40%) of the males and 13 (0.726%) of the females scored the moderate level of NA and 2 (0.112%) of the males, and 8 (0.447%) of the female elders scored the low level of NA. Since subjective well-being results from life satisfaction plus positive affect minus negative affect, it can be said that the sampled elders had low levels of subjective well-being.

5.3. Gender Differences in Variables

There was a statistical significant difference between men and women elders in support from families, friends, and significant others life satisfaction, positive affect, and TSWB independent sample t-test was used to check whether there was a substantial difference between men and women elders. According to the results (see Table 4):

Male and female elderly participants did not differ significantly in regard to life satisfaction, positive affect, friend support, and support from significant others ($t=-1.550$, $p>0.05$; $t=-.182$, $p>0.05$; $t=.887$, $p>0.05$; $t=1.163$, $p>0.05$ respectively). That is, received support from friends, significant others, life satisfaction, and positive affect were similar for males and females. There were contradictory findings regarding students' life satisfaction. For instance,

(Efklides & Moraitou, 2013) found females were found to report slightly increased awareness of life uncertainty, as well as slightly decreased positive and increased negative affect compared to males, (Valois et al., 2004), found that global life satisfaction reports were not related to gender. One reason may be the difference in the measure of life satisfaction used in this study and earlier studies. The majority of earlier studies discussed in this research were used as a five-item life satisfaction scale. However, in this study, a seven-item measure of life satisfaction scale was administered.

The other possibility for the difference could be gender equality and the empowerment of females. In the past, societies fail to recognize females' social values, reducing their life satisfaction. Now a day's the family, community, and the different government bodies recognize females' importance. This may be reinforcing an improvement in girls' life satisfaction. On the other hand, difference was no found in support gained from friends in this study. This result was consistent with (Wilburn & Smith, 2009), who found that parents' received support was similar for both sexes.

Male and female elders differed significantly regarding perceived adequacy of social support, negative affect, total Subjective well-being and received support from families ($t=-2.370$, $p<0.05$, $t=-2.636$, $p>0.05$; $t=-1.984$, $p>0.05$; $t=2.370$, $p>0.05$;). That is male elders in perceived total adequate support than female elderly participants ($M=17.482$, $SD=11.626$) and support from families $M=17.48$, $SD=4.36$; & $M=16.98$, $SD=4.453$; But females elders better than males in Total Subjective well Being ($M=45.864$, $SD=12.375$ & $M=44.74$, $SD=11.626$), and in negative affect ($M=17.45$, $SD=5.028$ & $M=16.8584$, $SD=4.515$) respectively). This finding contradicts that (Bokhorst et al., 2010) reported that families' received support was similar for boys and girls. However, this finding was similar to the results reported by (Haller & Hadler, 2006), who found that family support plays a greater role in protecting and guarding females against depression than males.

There was inconsistent research finding regarding gender differences in elderly research participants in subjective well-being. For instance, Deiner (2009) found that males reported higher levels of SWB than females, whereas Eryilmaz (2010b) found no gender difference in total subjective well-being. The reason for female elderly had significantly higher levels of

total point of SWB than male may be the global and national attention for females by different governmental and non-governmental bodies may cause high levels of SWB than the male elders.

Table 4: Summary of t- test results for gender comparisons on variables (N=1789; df= 1787)

Variables	Sex	Number	Mean	StD	t-test	Sign
PASS	Male	897	17.4827	4.35941	2.370	.018
	Female	892	16.9888	4.45376		
LS	Male	897	16.7670	6.51495	-1.550	.121
	Female	892	17.2466	6.56981		
NA	Male	897	16.8584	4.51572	-2.636	.008
	Female	892	17.4540	5.02799		
PA	Male	897	11.1126	6.02521	-.182	.856
	Female	892	11.1637	5.86149		
SWB	Male	897	44.7380	11.62651	-1.984	.047
	Female	892	45.8643	12.37529		
FAM Total	Male	897	17.4827	4.35941	2.370	.018
	Female	892	16.9888	4.45376		
FSS Total	Male	897	5.8350	1.55609	.887	.375
	Female	892	5.7702	1.53445		
SO Total	Male	897	5.8562	1.76412	1.163	.245
	Female	892	5.7601	1.73064		

Note: LS=life satisfaction, PASS=Perceived Adequacy of Social Support, PA=Positive Affect, NA=Negative Affect, FSS=Friend Social Support, SO=Support from Others, FAM=Family Support, SWB=Subjective Well-Being

5.4.Age differences in variables

To compare the four age groups (60-69, 70-79, 80-89, and 90+) on Perceived Adequacy of social Support, life satisfaction, positive affect, negative affect, Support from others, Support from families, Support from friends, and total subjective well -being one-way analysis of variance (ANOVA) was carried out. Regarding age , 60-69, 70-79,80-89 and 90 years and above did not differ significantly in perceived Adequacy of social Support, negative affect, positive affect, support from others, support from families, support from friends, and total subjective well -being (F=1.075 P> 0.05, F=0.042 p>0.05, F=1.873 P> 0.05, F=.625 P> 0.05, F=1.075, F=.560 P> 0.05 and F=.724, P> 0.05respectively). However, the age groups differed significantly regarding life satisfaction (F=3.457 P> 0.05). This finding, similar to the

research of (Bokhorst et al., 2010), reported no significant age difference was found for support gained from families, support from significant others, and support from friends.

Moreover, (Ermiş-Demirtaş et al., 2018) reported that affective components of SWB seem to increase with age and life satisfaction remains constant. Differing from the other (Valois et al. (2004) found that as individuals aged, their levels of SWB and overall life satisfaction decreased.

Generally, various researchers reported inconsistent results concerning the relationship between age and subjective well-being. For instance, Eryılmaz (2010) found that SWB and PWB increase with age. Besides, Kibret & Tareke (2017a) found that age is related to older adults' well-being. Deiner (2009) reported that SWB decreases with age. One possible explanation for the difference may be the difference in the use of assessment instruments. The other reason may be time differences.

After a significant difference was found among 60-69, 70-79, 80-89, and 90 years and above in life Satisfaction, analysis of post hoc multiple comparisons of the four age groups using Scheffe pairwise comparison test was carried out to identify further the specific pair of means that produced the observed significant difference.

5.4.1. *Multiple Comparisons on Life Satisfaction*

The Scheffe post hoc tests (see table 6) above showed that:

- There was a significant mean difference (1.3379) between 60-69 and 80-89 elders in life satisfaction. Elders between 60-69 ($M=17.6507$, $SD=6.6468$) had more life satisfaction than elders aged between 80-89 ($M=16.3128$, $SD=6.631$). However, no statistically significant mean difference was found between 60-69 and 70-79 and 60-69 and 90 and above in life satisfaction (see Table 6).

Table 5: ANOVA Table summary of the four age groups on variables treated in the study (N=1789)

Variables	Age groups	N	M	SD	F	Sig.
PASS	60-69	544	17.0221	4.35567	1.075	.358
	70-79	692	17.3497	4.42061		
	80-89	358	17.4665	4.50555		
	90<	195	17.0103	4.36480		
LS	60-69	544	17.6507	6.64679	3.457	.016
	70-79	692	16.7890	6.48489		
	80-89	358	16.3128	6.63176		
	90<	195	17.2513	6.17556		
NA	60-69	544	17.1893	4.73837	.042	.989
	70-79	692	17.1272	4.95549		
	80-89	358	17.1983	4.63543		
	90<	195	17.0821	4.60876		
PA	60-69	544	11.0607	5.91639	1.873	.132
	70-79	692	11.1994	6.03757		
	80-89	358	11.5726	6.10497		
	90<	195	10.3385	5.29621		
SWB	60-69	544	45.9007	12.41150	.724	.538
	70-79	692	45.1156	11.79803		
	80-89	358	45.0838	12.01137		
	90<	195	44.6718	11.68553		
FAM	60-69	544	17.0221	4.35567	1.075	.358
	70-79	692	17.3497	4.42061		
	80-89	358	17.4665	4.50555		
	90<	195	17.0103	4.36480		
FSS	60-69	544	5.7335	1.51988	.560	.642
	70-79	692	5.8280	1.54270		
	80-89	358	5.8240	1.56459		
	90<	195	5.8667	1.59337		
SO	60-69	544	5.7261	1.68636	.625	.599
	70-79	692	5.8382	1.77451		
	80-89	358	5.8715	1.78076		
	90<	195	5.8154	1.76354		

Note: LS=life satisfaction, PASS=Perceived Adequacy of Social Support, PA=Positive Affect, NA=Negative Affect, FSS=Friend Social Support, SO=Support from Others, FAM=Family Support, SWB=Subjective Well-Being

Table 6: The multiple comparisons test (Scheffe post hoc) of the four age groups on Life satisfaction (N= 1789)

(I) age of the respondents	(J) age of the respondents	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
60-69	70-79	.86172	.37426	.151	-.1855	1.9089
	80-89	1.33789*	.44450	.029	.0941	2.5817
	90<	.39945	.54515	.911	-1.1260	1.9249
70-79	60-69	-.86172	.37426	.151	-1.9089	.1855
	80-89	.47617	.42522	.740	-.7137	1.6660
	90<	-.46226	.52955	.859	-1.9440	1.0195
80-89	60-69	-1.33789*	.44450	.029	-2.5817	-.0941
	70-79	-.47617	.42522	.740	-1.6660	.7137
	90<	-.93843	.58132	.457	-2.5651	.6882
90<	60-69	-.39945	.54515	.911	-1.9249	1.1260
	70-79	.46226	.52955	.859	-1.0195	1.9440
	80-89	.93843	.58132	.457	-.6882	2.5651

*. The mean difference is statistically significant at the 0.05 level.

5.5. Correlation among variables

Person product-moment correlations(r) were computed to find out whether there was a significant relationship among variables treated in the study or not. Life satisfaction has significant positive relationship with positive affect($r = .382, p < 0.01$), and Total SWB ($r = .746, p < 0.01$); and negatively correlated with support gain from family members ($r = -.062, p < 0.01$) and perceived adequacy of social support ($r = -.063, p < 0.01$). However, Life satisfaction has no significant relationship with negative affect($r = -.031, p < 0.01$), support from friends($r = .021, p < 0.01$), and support from significant others($r = -.017, p < 0.01$). Negative affect was significantly and negatively correlated with positive affect ($r = -.205, p < 0.01$), TSWB ($r = -.517, p < 0.01$), and positively correlated with support from families($r = .301, p < 0.01$), support from families($r = .310, p < 0.01$), and support gained from significant others($r = .303, p < 0.01$). Also, there was a significant positive relationship between Positive affect and TSWB ($r = .784, p < 0.01$), Support

from family ($r = .070, p < 0.01$), and Support from Significant others ($r = .109, p < 0.01$). The correlation between Total subjective well-being and family support ($r = .121, p < 0.01$), support from friends ($r = .176, p < 0.01$) and support from significant others ($r = .165, p < 0.01$) was positive and significant (See Table 7).

Regarding, support from family members has a significant positive relationship with support from friends ($r = .719, p < 0.01$) and support from significant others ($r = .752, p < 0.01$); whereas, Support from friends positive significant relationship with support from significant others ($r = .860, p < 0.01$) (see table 7).

Table 7: Pearson product-moment correlation matrix of all variables (N=1789)

Variables	Correlations							
	PASS	LS	NA	PA	SWB	FAMIS	FSS	SO
PASS	1							
LS	-.063**	1						
NA	.301**	.031	1					
PA	.070**	.382**	-.205**	1				
SWB	.121**	.746**	-.517**	.784**	1			
FAMIS	.789**	-.062**	.301**	.070**	.121**	1		
FSSTOTAL	.719**	.021	.310**	.107**	.176**	.719**	1	
SOTOTAL	.752**	-.017	.303**	.109**	.165**	.752**	.860**	1

*Correlation significant at the 0.05 level (2-tailed) **Correlation is significant at the 0.01 level (2-tailed)

Note: LS=life satisfaction, PASS=Perceived Adequacy of Social Support, PA=Positive Affect, NA=Negative Affect, FSS=Friend Social Support, SO=Support from Others, FAMIS=Family Support, SWB=Subjective Well-Being

5.6. Regression Analysis

The proportion of variance on elderly SWB is explained by social support's perceived adequacy, support from friends, families, and significant others.

The study's main objective was to examine to what extent of the variance in (component and total) SWB of the elderly explained by the perceived adequacy of social Support, Support from friends, families, and significant others. To achieve this objective stepwise regression analysis was carried out. The regression analysis results (see table 8) indicated a substantial contribution of friends' support to elderly Subjective well-being ($R^2 = 0.031$). Thus, the independent contribution of support gained from friends to the variance to elderly Subjective well-being 3.1%. This indicated that 96.9 0% of the variance on elderly total subjective well-being was

contributed by other factors that were not included in the present study. This result is the same as (Gülaçti, 2010; DE SOUZA et al., 2018) found that the quality of life was improved by having social support from family and friends, frequent contacts with friends, living in good neighborhoods', and having two cars. Besides, McNicholas (2002) found that social support influenced life happiness among the elderly, congruent with the present study.

Table 8: Regression analysis of perceived adequacy of social Support, Support from friend, families, and significant others (N-1789)

Dependent variables	R	R ²	R ² _{change}	F _{change}	Sig. F _{change}
Life satisfaction	.176 ^a	.031	.031	57.325	.001

a. predictors (constant), support from friends

6. Conclusions

Given that this research studied the influences of perceived adequacy of social support and demographic variables on elderly subjective well-being by using only self-reports of participants, we can draw the following conclusion from the results and discussion made so far:

1. The study showed that more than half of the participants' elders scored low levels of life satisfaction, positive affect, and a high negative effect. Then, it is concluded that the level of SWB of the elderly high.
2. The independent t-test results indicated no significant difference between male and female elders about life satisfaction, positive affect, Support from friends, and significant others' Support. However, there was a gender difference in the elderly's perceived adequacy of social support, negative affect, total Subjective well-being, and support from families.
3. The correlation analysis revealed that the study variables were significantly correlated with each other, except life satisfaction, which was not significantly correlated with negative affect; Support from friends; and Support from significant others.
4. One way ANOVA results showed that:

- The four age categories of elders did not differ significantly in Perceived Adequacy of social Support, negative affect, positive affect, Support from others, Support from families, Support from friends, and total subjective well-being. However, the age groups differed significantly regarding life satisfaction.
 - Analysis by the Scheffe comparisons showed that: The Scheffe comparisons of the variables for the age groups indicated a significant difference between 60-69 age and 80-89 elders in life satisfaction.
5. The regression analysis results indicated a significant contribution of support gained from friends to the variance to elderly Subjective well-being 3.1% and had a significant positive contribution to the elderly's subjective well-being.

7. Recommendations

Based on the significant findings and conclusions made, the following possible solutions which can enhance the subjective well-being level of the elderly were recommended:

1. Understanding the status of the elderly regarding their subjective well-being and perceived adequacy of social support enables different organizations or professionals in the area to design various programs that help the elderly have a better quality of life.
2. The findings of male and female elders' differences regarding adolescents SWB have significant social workers, nurses, teachers, and a counselor who may be working with adolescents of both sexes to foster their well-being.
3. Older people's economic potential needs to be supported through policy action to help those older people stay economically stable for longer, in both formal and informal sectors.
4. Community active programs, like the elderly club, effective participation, rehabilitation center, etc., should be organized for better care and support for the elderly in their area.
5. Educational institutions like Wollo University, Dessie, and Kemissie college of Teachers education should encourage and provide life skill training for older persons. Concerning the educational level, the study revealed that subjective well-being increases along with an increase in the educational level of the elderly. It is advisable that Life skill training would also provide them with an awareness of their environment, which, in

turn, increases the subjective well-being of the elderly. Regarding this, kinds of literature have argued that life skill training is vital for older persons for their practical life.

6. Finally, this study is limited in Dessie Town; South Wollo Zone, and Oromia Zone; therefore, further research should be conducted in-depth by covering the large town and including different variables

Declaration of Conflicting Interests

The author(s) declared no potential conflicts of interest concerning the research, authorship, and publication of this article.

Acknowledgment

We wish to express our sincerest appreciation to the elderly participants and social affairs officers in all study areas. Their voluntary contribution and their provision of personal data in the study was invaluable to us.

Funding

The author(s) received financial support for the research, authorship, and publication of this article from Wollo University, Ethiopia, Research Directorate office.

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