Master of Science in Public Health

Quality of Life and Perceived Social Support among Elderly People Residing in Rawalpindi District: A Mixed Method Study

By

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(2023)

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(362881-PIO/MSPH-2021)

Dissertation submitted in partial fulfilment of the requirement for the degree of:

MASTER OF SCIENCE IN PUBLIC HEALTH(2023)

To

Al-Shifa School of Public Health, PIO, Al Shifa Trust Eye Hospital,
Faculty of Medicine
Quaid-i-Azam University,
Islamabad.

Word Count:

15648

Declaration

In submitting this dissertation, I certify that I have read and understood the rules and regulations of DPH and QAU regarding assessment procedures and offences and formally declare that all work contained within this document is my own apart from properly referenced quotations.

I understand that plagiarism is the use or presentation of any work by others, whether published or not, and can include the work of other candidates. I also understand that any quotation from the published or unpublished works of other persons, including other candidates, must be clearly identified as such by being placed inside quotation marks and a full reference to their source must be provided in proper form.

This dissertation is the result of an independent investigation. Where my work is indebted to others, I have made acknowledgments.

I declare that this work has not been accepted in substance for any other degree, nor is it currently being submitted in candidature for any other degree.

_____ _____

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ABSTRACT

Background: Pakistan is a rapidly aging country, Research on the relationship between quality of life and perceived social support among the elderly is crucial for understanding their well-being.

Objectives: This study aimed to assess the quality of life and perceived social support of elderly individuals in families and old age homes, examine their association with sociodemographic factors, and explore their perceptions of these aspects.

Methodology: A mixed-method study design was used with elderly residents of the Rawalpindi district. A cross-sectional survey of 80 senior citizens meeting the inclusion criteria utilized the WHO Quality of Life (OLD), Multidimensional Scale of Perceived Social Support. In-depth interviews with 14 participants provided qualitative insights. Data were analyzed using SPSS version 25.0, and Thematic Analysis was employed for qualitative data. An independent sample t-test and Pearson's correlation analysis were used to determine associations.

Results: Elderly individuals living with family showed (64.63±20.069) significantly stronger personal relationships and intimacy compared to those in old age homes (37.08±27.851). Social interaction, past, present, and future activities facets differed significantly, with no significant differences in sensory abilities, autonomy, or death-related aspects. Significant differences in perceived social support were found across domains between elderly individuals living with family and those living in old age homes. Correlation analysis revealed significant relationships between education, marital

status, living arrangements, household income, perceived social support, and quality of life.

Conclusion: This study found significant differences in WHOQOL-old scores between elderly living with families and those in old age homes. This study indicates that living arrangements significantly influence the perceived social support of the elderly, with Education and financial dependency scores positively correlated with quality of life and social support, and negatively correlated with living arrangements.

Keywords: Pakistan, Aging population, living standard, Social support, Old-age homes, family, Sociodemographic factors.

ACKNOWLEDGMENTS

In the name of Allah, the most Merciful and Beneficent

First of all, I am thankful to Allah Almighty, the most merciful and beneficent, for making the journey of my life till this point, including the completion of my thesis, which is a blessing indeed. I would also like to extent my gratitude to my dearest friends Ezzah, Rukhsana, and Nishwa who owe me a big time for their support throughout my research work. I humbly thank those who supported me in this regard.

My utmost gratitude to my thesis supervisor, **Dr. Ayesha Babar Kawish,** without your expertise and guidance this would not have been possible. Despite your busiest and tiring routine, you have provided us with your skillful guidance and worthy suggestions throughout this time.

I owe my supreme gratitude to my parents and siblings for their unconditional love and support for me. They have always supported me in each and every phase of my life. Whatever I am and wherever I am, is just because of the altruistic love of my parents. Their prayers have made me strong enough to face every problem and difficulty of life.

I would like to thank all my teachers especially **Dr. Ahmed Abdullah** and **Sir. M. Junaid Iqbal** who helped me in professional development during my master's degree. I humbly thank all the people who have supported me in this regard.

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CHAPTER I: Introduction

The overall objective of this study was to explore how the living arrangements of older people can significantly impact their quality of life and the level of perceived social support they receive. This mixed methods study explores and compares the quality of life and perceived social support among elderly people in old homes and those in the general community in Rawalpindi district, Pakistan.

The increase in longevity has been one of the greatest achievements(K. Christensen et al., 2009). According to the World Health Organization (WHO), the world's elderly population aged 60 years and older will expand (2.1 billion) by 2050. Between 2020 and 2050, the global elderly population aged ≥ 80 years is expected to reach 426 million. By 2050, 80% of people over the age of 60 will live in low- and middle-income countries. Population aging is becoming a problem in developing countries such as Pakistan, where nine million people who are currently 60 or older are expected to increase to 42 million by 2050((WHO); Ahmad, 2020).

Quality of life is a complex concept that can be explained in several ways. There is general agreement among researchers that quality of life is multi-dimensional and can be assessed from subjective and objective perspectives(Lodhi et al., 2019). The World health organization (WHO) defines quality of life as "an individual's perception of their position in life in the context of the culture and value systems in which they live and in relation to their goals, expectations, standards, and concerns"(Whoqol, 1993). Quality of life (QOL)

also is described as a concept that includes physical and mental health, social relationships, and emotional well-being (Baernholdt et al., 2012). Moreover, (Borthwick-Duffy, 1992) defined quality of life as one's life circumstances and satisfaction with them.

The level of satisfaction with being empathized, valued, and supported in society is defined as perceived social support, also known as subjective support (Xiao, 1994). It is further divided into three dimensions, family support, friends, support, and significant others support (Väänänen et al., 2014). Functional social support refers to the available support an individual perceives they have when they need to cope with acute or chronic stresses and comprises various forms: emotional (advice and encouragement), companionship (sense of belonging and reliance), instrumental (resources for behavior), informational (guidance and instructions), and validation (social comparison and normative information). These forms aid individuals in coping with stress and engaging in desired behaviors (Golaszewski & Bartholomew, 2019).

Old-age homes are different from care facilities found in developed nations, such as Residential Care Facilities, Continued Care Retirement Communities, Assisted Living Facilities, and Nursing Homes. However, they often carry a stereotype of stigmatized places where older adults have been neglected and abandoned by their families (Tariq et al., 2022). As the population ages, traditional welfare states face severe challenges(Kaare Christensen et al., 2009). Housing supports the well-being of older people, which enables physical activity, independence, social activities, and safety. Having accessible

environments with amenities and services that promote residents' well-being (Jolanki, 2021).

Pakistan is a socially cohesive society that respects and values elders. The extended family system, on the other hand, has been weakened, resulting in the abandonment of parents in old homes. While these facilities offer services and amenities, they do not address all of their residents' problems, which include psychological, social, and physical issues (Gull & Dawood, 2013).

In 2004, the WHOQOL working group developed quality-of-life standards for people aged 60 and above, which were tested in several countries (Power et al., 2005). However, there are very few studies of the QOL in older people using WHOQOL-Old (Organization, 2006) in Pakistan.

1.1. Rationale:

There are very few studies comparing the quality of life and perceived social support between elderly living with families and in old age homes, but in Pakistan, The availability of data for older people is not particularly commendable. Most data are not uploaded by the relevant institutions due to a lack of attention, limiting the research.

This Master's thesis aims to assess the quality of life and perceived social support of the 60+ older adult population living in old age homes and the community of Rawalpindi (Pakistan) using (WHOQOL-OLD) and (MSPSS). In addition, this study seeks to contribute conceptually by examining the potential factors that affect the quality of life in a developing economy.

The findings of the study will be a valuable addition to the current literature. Along with this, these findings will also help provide insights into the different factors associated with quality of life.

To achieve the aforementioned broad aims, the following research questions and objectives are addressed in this thesis:

1.2. Objectives:

1. To measure the quality of life and perceived social support of elderly people living with families and those residing in old age homes.
2. To find an association between quality of life and perceived social support of elderly people with socio-demographic factors.
3. To explore the perception of elderly people about their quality of life and perceived social support.

CHAPTER II: Literature Review

Internationally, the World Health Organization (WHO) has played a significant role in advocating age-friendly environments, social inclusion, and access to quality healthcare for the elderly. They have provided guidelines and recommendations to promote the well-being and participation of elderly people in society, ultimately enhancing their quality of life (World Health, 2007). Additionally, guidelines from the International Association of Gerontology and Geriatrics (IAGG) have provided valuable recommendations for policymakers and healthcare professionals to address the unique challenges faced by the aging population (Tolson et al., 2011).

2.1. Aging population and quality of life

Several studies on elderly care and the problems faced by older individuals have been conducted in both developing and developed countries (Luo, 2016) (Conrad et al., 2017). Such problems include physical abuse, economic abuse, social well-being issues, psychological health issues, and family issues (Saeed & Shoaib, 2012). Aging is often associated with functionality declines, affecting their daily activities and experiences, which, in turn, may influence their emotional well-being (Freedman et al., 2019). Because of the deterioration of their physical and psychological abilities, the elderly are more prone to health problems. With increasing age, the body's immunity and ability to

defend itself against illness decreases. The aging process causes biological changes that cause a decline in vital functions (Neeraj, 2022).

In the Disablement Process Model, functional limitations are emphasized as a fundamental component of the manifestation of disability from a health condition (e.g., chronic disease) (Verbrugge & Jette, 1994). Mental health and well-being directly affect individuals, families, and communities. Physical limitations or chronic diseases can affect the quality of life. Aging is often associated with the need for support (Yang et al., 2020). Social resources such as a diverse network can protect older adults' mental health when their physical health declines with age (Do, 2022). Older people are at higher risk during economic downturns and recessions, especially when they happen suddenly and unexpectedly. This is because they have less time until retirement to recover financially (Cocuzzo et al., 2022).

As synthesized by a literature review, there are three domains of determinants of healthy aging: physical, mental/cognitive, and social well-being. The ten determinants of healthy aging include physical activity, diet, self-awareness, outlook/attitude, life-long learning, faith, social support, financial security, community engagement, and independence (Abud et al., 2022). Additionally, throughout our lives, we have been affected by ageism, which is discrimination based on age. As a result of discriminatory attitudes and behaviors, it can lead to social inequality and abuse of older adults that can impact their self-perception, social inclusion, and overall quality of life (Butler, 2009; Molina-Luque et al., 2022). Moreover, the increasing number of older people will pose major challenges to the healthcare system(Kaare Christensen et al., 2009).

2.2. Social support and its impact on quality of life

Perceptions of expected support from children are thought to be more important than receiving support in relation to the health of older parents (Cheng, 2017). Social support and well-being significantly contribute to improved life satisfaction among older individuals (Bramhankar et al., 2023). Social networking depends on an individual's socioeconomic status with certain demographic factors, contacts with children, and working conditions. Besides preventing experiences or emotional disturbances like anxiety and depression, social support protects older people from the negative effects of age-related challenges like losing family members, interpersonal conflicts, and even extraordinary occurrences like natural disasters (Sarla et al., 2020). Social factors such as social support financial security, and community engagement play an important role in promoting healthy aging (Abud et al., 2022). Social factors play a significant role in health-related quality of life in older adults. A multivariable analysis revealed that sociodemographic, socioeconomic, psychosocial, and behavioral factors influence the quality of life in older adults (Geigl et al., 2023).

Formal and informal social support both improve the quality of life of older adults, but informal social support has a greater impact than formal social support (Shen et al., 2022). (Lowenthal & Haven, 1968) Studied older individuals to find out how social support affects their ability to cope and adapt. They found that having a close friend and engaging in social groups were strongly linked to a positive outlook and improved response to difficult situations. Studies show that having supportive relationships and

strong social networks has positive effects on mental and physical health (PEARSON, 1986)

Higher levels of social support are associated with a lower risk of mental disorders, diseases, mortality, and improved quality of life (Reblin & Uchino, 2008) Loneliness and social networks independently affect the mood and well-being of older individuals (Golden et al., 2009). Research indicates that having positive relationships with family, friends, and neighbors improves one's quality of life. However, a decline in social interactions, such as losing connections within a social network, is strongly linked to a lower quality of life.(Meléndez-Moral et al., 2013; Sok & Choi, 2012). Feelings of loneliness and limited children's relationships are primary reasons for older adults seeking voluntary or involuntary old age home admission, as they lack social support and meaningful connections (Hedge & Borman, 2012).

The study conducted in Gujrat, Pakistan highlighted that family support and friendship were positively and significantly linked to the psychological well-being of older people. Family support improves the physical and mental health of elderly individuals (Shoaib et al., 2011). The comparative study was conducted on 60 elderly individuals from OAHs and 120 elderly individuals living within family setups and showed that the quality of life of elderly people in domains of autonomy, past present & future activities, social participation, and intimacy was better in a family setup than in old age homes. (Amonkar et al., 2018).

2.3. Old homes and quality of life

The traditional values of respect and honor for old people in Pakistan have shifted due to the breakdown of the joint family system and the shift towards nuclear families. A study in Punjab, Pakistan, identified social, economic, family structure, personal income, and family income as key factors affecting social adjustment in old age. The study further found that respondents' marital status, gender, and education level are related to their social adjustment in old age (Gulzar et al., 2008).

The study conducted on 400 older adults in Karachi found that 93% were unwilling to reside in an old age home. The reasons include the preference to live with families and/or loved ones and the negative perception associated with these institutions (Qidwai et al., 2018).

A study conducted in Lahore on 120 elderly from both old age homes and family settings found out that elderly living with their families are more likely to receive respect, and emotional and social support thus contributing to fewer psychological issues and therefore having a better quality of life. Furthermore, psychological issues are more common among the elderly in old age homes. Psychological issues contribute to low quality of life among the elderly living in old age homes (Parshad & Tufail, 2014a).

In contrast to the above-mentioned study, those who exercised had higher perceived social support than those who did not, those who were visited had higher perceived social support than those who were not, and those who were divorced/had a deceased spouse

had higher perceived social support than those who were single. It was discovered that as social support grows, depression decreases (Tambag et al., 2019).

(Saritha et al., 2022) A study conducted on 100 elderly individuals from both old-age homes and family settings found that those living in old-age homes had a higher prevalence of past psychiatric illnesses, memory disturbances, concentration problems, error behavior, and thought disturbances than those living in the community. However, the study found that the quality of life was poorer in the community group than in the old-age home group. The study only focused on a particular group of elderly people, so its findings may not apply to all elderly populations. This study aimed to compare the quality of life and social support as well as the psychiatric morbidity and cognitive functioning of these two groups.

The study was conducted on 200 participants, with 100 elderly individuals in each group, and it focuses on the prevalence of depression in older adults in both settings. The study found that the overall prevalence of depression was higher among elderly people living in old age homes, with a higher prevalence among older women than among men. A statistical difference in depression by marital status was also found between elderly individuals in family settings and old age homes (Gautam et al., 2022).

Another study was conducted on 120 senior citizens to compare the quality of life of seniors residing in old age homes and their residences and found that the quality of life was better among the people living in their residences than among those residing in old age homes. Quality of life level was significantly associated with the sex and educational status of the research participants (Piya et al., 2020).

2.4. Conceptual Framework

This research has assessed the quality of life and perceived social support in older adults with regard to their living arrangements in Rawalpindi district, Pakistan.

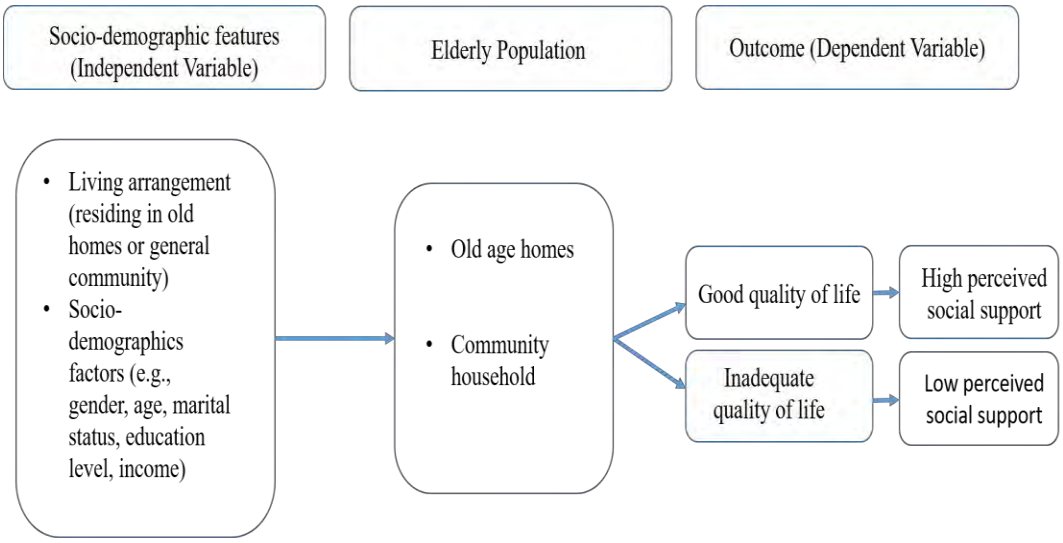

Figure 1: Conceptual Framework

2.5. Operational Definition

2.5.1 Quality of Life:

The World health organization (WHO) defined quality of life (QOL) as “an individual's perception of his/her position in life in the context of the individual’s environment, belief systems, and goals” (Whoqol, 1993).

2.5.2 Perceived Social Support:

Perceived social support: an individual's perception of available functional and overall support from friends, colleagues, and family during times of need. Social support is defined as the availability of people on whom one can rely or assistance received through interactions (Hailey et al., 2022; Pérez-Villalobos et al., 2021).

2.5.3 Older Adults:

The United Nations defines an older person as someone over 60 years of age (UNHCR).

2.5.4 Old age homes:

Old-age home organizations offer a calm and comfortable place for the elderly. As people age, they require assistance with daily activities such as washing and dressing, as well as household tasks such as cleaning and cooking. They offer companionship and assurance to residents. These homes provide medical care, security, cleanliness, and companionship, thereby improving living conditions and the overall quality of life (Of et al., 2021) (Barber et al., 2020).

CHAPTER III: METHODOLOGY

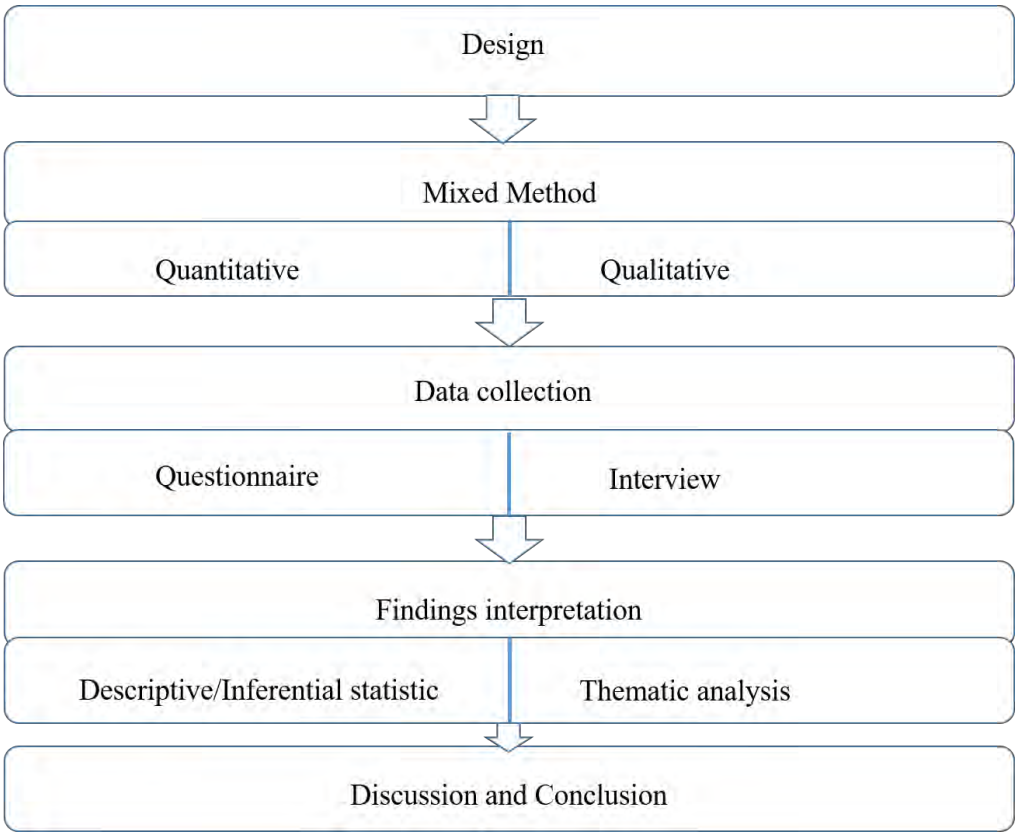

Figure 2: Research design

Phase 1: Quantitative Research Methodology

3.1 Research Design

A cross-sectional study design.

3.2 Research Duration

The duration of this study was six months i.e. from March 2023 to August 2023.

3.3 Study Area

The study setting was the Old age homes of Rawalpindi and the elderly living with families in Rawalpindi.

Figure 3: Old age homes of Rawalpindi

3.4 Sample Size:

This Study has access to a population of 80 elderly individuals. Although no sampling methodology was employed, we utilized a set of inclusion criteria for the selection of the participants. A sample was selected based on similar research conducted in India

(Vignesh et al., 2022). Participants were selected from two groups: 50 elderly individuals living with families and 30 elderly individuals living in old age homes in Rawalpindi district.

3.5 Research Participants

The Study population for both the quantitative and qualitative parts was the elderly population and was based on the following inclusion and exclusion criteria.

3.5.1 Inclusion criteria:

- Individuals who are 60 years of age or older.
- Those who can understand Urdu.

3.5.2 Exclusion criteria:

- Individuals who would be unable to participate in the study due to severe cognitive impairment.
- Those elderly who did not agree to participate were excluded from the study.

3.6 Sampling Technique

A Convenience Sampling technique was used to collect the data.

3.7 Sampling Unit

Elderly people aged 60+ above living in Rawalpindi district.

3.8 Data Collection Instrument

3.8.1 Questionnaire Design

Data was collected using an interview-administered questionnaire. A Performa was developed to collect data regarding the sociodemographic characters of the respondents and their Quality of life and perceived social support. The questionnaire was developed using an adapted tool from two validated tools; Social support was assessed using the Multidimensional Scale of Perceived Social Support (MSPSS) (Zimet et al., 1990) and the World Health Organization Quality of Life Assessment for Older Adults (WHOQOL-OLD) was used to determine overall QOL (Power et al., 2005).

Social support was measured using the Multidimensional Scale of Perceived Social Support (MSPSS). (Zimet et al., 1990). Which was previously validated for the South Asian population and the scale has been translated into Urdu (Akhtar et al., 2010). Previous studies have shown good reliability and psychometric properties for this scale (Ashfaq et al., 2018; Tariq et al., 2020).

These are validated tools for assessing the quality of life and perceived social support of the elderly. The questionnaire is attached to Annexure-A.

3.8.2. Content of the Questionnaire:

The questionnaire contained three major sections:

1. **The first part** included questions related to the socio-demographic characteristics of the respondents, such as age, gender, marital status, income, and living arrangement.
2. **The second part** included the **World Health Organization Quality of Life Assessment for Older Adults (WHOQOL-OLD),** consisting of 24 items graded on a 5-point Likert scale to determine overall QOL that addresses six facets: sensory abilities, autonomy, death and dying, past, present, and future activities, social participation, and intimacy.
3. **The third part** includes a **Multidimensional Scale of Perceived Social Support (MSPSS)**. This 12-item scale measures the overall score of perceived social support and includes three subscales: family support, friends' support, and significant others' support. The participants rated their level of agreement with each statement on a Likert scale ranging from 1 (very strongly disagree) to 7 (very strongly agree).

3.9 Study Variables

3.9.1 Outcome Variable

Dependent Variables are Quality of Life and Perceived Social Support of Older Adults.

3.9.2 Independent Variable

Data on independent variables was collected through a structured Performa that was constructed after an international and national literature review. The Performa included socio-demographic variables such as age, gender, marital status, qualification, income, and living arrangement.

3.10 Research Process

3.10.1 Translation and reliability of a (WHOQOL-OLD)

The forward and backward translation processes and pilot testing of the (WHOQOL-OLD) questionnaire were conducted. Translation of the research questionnaire from English to Urdu and back to English was performed by one of the English teachers from a government school. This was done as a procedure to ensure that meanings in both languages coincided.

Figure 4 Translation process

It consists of 24 items rated on a 5-point Likert scale that addresses six facets: sensory abilities, autonomy, death and dying, past, present, and future activities, social participation, and intimacy. Each facet contained 4 items. After reverse-coding items from the sensory abilities facet and death and dying, the transformed scores were obtained. Transferring a raw score to a transformed scale score between 0 and 100 makes it possible to express the scale score as percentages between the lowest (0) and highest (100) possible values. In this case, higher scores represent higher levels of QOL.

3.10.2 Pilot Testing

Before starting the formal data collection procedure, pilot testing was performed by including 10% of the sample size. The questionnaire was tested for any future changes, and no major changes were made after the pilot testing. The value of Cronbach alpha for the Multidimensional Scale of Perceived Social Support “MSPSS” was 0.905 while for (WHOQOL-OLD) Scale it came out to be 0.902.

3.10.3 Formal Data Collection

Data were collected using an interview-administered questionnaire and no data collectors were hired. Elderly people living in communities and old homes were approached. Consent was obtained orally from all participants, and only those who agreed to participate in the research process were included. Data collection was completed in approximately two months. All filled questionnaires were kept protected in plastic files, and no one had access to them other than the researcher.

3.11 Data Analysis Procedure

The Statistical Package for Social Sciences version 25 (IBM SPSS Statistics 25) was used for statistical analysis. After careful data entry, data were checked for any errors before proceeding to further analysis. After cleaning the data, data transformation was performed for certain variables. Data analysis was done in two phases; descriptive analysis and inferential analysis.

All the results are divided into various sections for easy understanding and are presented in the tables and figures.

3.11.1 Descriptive Analysis

Descriptive statistics were generated for sociodemographic characteristics. For categorical variables, data were summarized in the form of frequencies and percentages and presented in table form. Continuous variables were summarized by mean and standard deviation as the data was normally distributed.

3.11.2 Inferential Analysis

To assess and measure the quality of life and perceived social support Independent Sample t-test to compare groups of elderly living in old age homes and with families and the association between the quality of life and perceived social support with sociodemographic correlation analysis (Pearson's) test was used. A P-value less than 0.05 was considered statistically significant.

3.12 Reliability Results

Table 1 presents Cronbach's Alpha for the two scales of this study. The perceived social support scale includes 12 items and the Cronbach Alpha value is 0.94, and the quality of life scale includes 24 items with a Cronbach's Alpha of 0.87.

Table 1 Cronbach's Alpha of Quality of Life and Perceived Social Support (N=80)

Variable	No. of items	α
Quality of Life	24	0.87
Perceived Social Support	12	0.94

Note. α=Cronbach's Alpha

Phase 2: Qualitative Research Methodology

3.13 Research Design

The study design used for the qualitative part is an “Ethnography Study”

3.14 World view

Pragmatism

3.15 Sampling Technique

Purposive sampling was used to collect data.

3.16 Study Sample

Elderly individuals were interviewed until saturation was achieved. About 14 In-depth interviews of elderly individuals residing in both old age homes and with their families.

3.17 Data Collection

In-depth interviews were conducted. Consent was taken verbally from the interviewers before every interview and afterwards, they were made comfortable. Their privacy and confidentiality were ensured. Probing questions, sub-questions leading questions were asked to achieve the required information.

3.18 Data Collection Tool

The self-devised interview guide was used as a data collection tool. In-depth interviews were performed. Interviews were conducted, firstly as unstructured with general questions followed by semi-structured interview questions. The interviews were audio recorded with the permission of respondents with the help of an audio recorder where participants were asked to share their experiences of their living with families and in old age alongside their quality of life and social support.

3.19 Plan of analysis

The data obtained from the interviews were evaluated manually. Codes and categories were identified by analyzing the interviews repeatedly and logical themes were generated afterwards. Validation of the data was assured keeping aside the researcher's bias.

Thematic Analysis was done: Transcription: Themes: Sub Themes

Figure 5 Process of thematic analysis

3.20 Ethical consideration

Ethical approval for the study was obtained from the Institutional Review Board of the School of Public Health, Al-Shifa Trust Eye Hospital. Afterward, permission was obtained from the elderly living in the community and the elderly living in old age homes. Informed consent was obtained verbally from all participants before completing the questionnaire. It was made sure that confidentiality was ensured about the personal information. The benefit-risk ratio of the study was explained to the participant

CHAPTER IV: RESULTS

Phase 1: Qualitative Analysis of quality of life and social support

The purpose of this study was to follow up on quantitative research and explore the perception of the elderly about their overall assessment of life at this age particularly, about their quality of life and social support. All interviews are semi-structured preceded by an interview guide. At, first informal consent was taken with a brief introduction of the researcher and her purpose for the study. The following research questions guided this study.

1. Can you tell us a little about yourself?

2. How do you spend your days?

3. What do you enjoy doing in your free time?

Quality of life questions: To understand the participants' quality of life.

4. How would you describe your overall quality of life?

5. How do you feel about your life at the moment?

6. What are the things that make you happy or unhappy?

Perceived social support questions: To understand the participants' perceived social support.

7. How do you feel about the support you receive from family and friends? If you receive any support what kind of support would you get and how do you feel about it?

8. What kind of social support would you like to receive?

9. Have you ever felt isolated or lonely? If yes, can you describe that experience?

Audio taped conversations, asynchronously (respondents answered the questions at their own pace and over a long period) were analyzed. Excerpts of the interview are provided in this chapter to aid in support of data analysis. Within the excerpts, the sentences written in italics are respondent's quotes. All the interpretations were done precisely and carefully, keeping aside the researcher's bias.

4.1 The participants (background)

14 participants volunteered to be a part of the study 7 from those elderly residing with families and the rest are those residing in old age homes. One participant who lives with family dropped out in between the interviews and refused to talk.

Table 2: A summary of the participant's demographics is presented.

Respondent's Sr. No	Gender	Age	Living arrangement
1	Female	71	With family
2	Male	70	With family
3	Female	75	With family
4	Male	70	With family
5	Female	70	With family
6	Male	64	With family
7	Female	70	In an old age home
8	Male	65	In an old age home
9	Female	67	In an old age home
10	Female	70	In an old age home
11	Male	60	In an old age home
12	Male	87	In an old age home
13	Male	70	In an old age home

For each transcript, significant phrases or sentences that belong directly to the experiences of the elderly in both settings were keenly identified. Underlying meanings were then formulated from significant sentences and phrases. These formulated meanings were then grouped into categories and themes, which aided the emergence of themes that were common across all the transcripts. The results were then incorporated into an in-depth and exhaustive description of the phenomenon

4.2 Themes

Theme 1: Overall Quality of Life	Theme 2: Perception of Social Support	Theme 3: Loneliness and Isolation	Theme 4: Spiritual practices and coping mechanism
Codes from the elderly living with families:			
used to be so energetic	to participate in activity take place around my house	feel lonely	Pray fajr on time
Growing age worsened my physical health	only bread earner in my family	I don't have anyone to share my feelings	doing Zikr all-day
got injured	My sister-in-law and her family are my main source of social support	only had one close friend	Allah just doesn't make me dependent on anyone
Health doesn't allow me to keep the sacrificial animals	My nephew sent 1000 rupees	husband died 4 years ago	Spent my time remembering Allah
The doctor found cataracts in my eyes	have support from my family	feel lonely, miss husband	I pray tahajuud
content with my life	My children are my life	don't have any friends	
I do all the work myself	share my worries and my concerns with son.	husband died. There is one to share problems	
	Share my worries with my wife	Best and close friends died	

	don’t receive the support I want share my problems with my children and wife		
Codes from the elderly living in old age home:			
I rest 24/7 as now I can't move much.	need support only for medicine, and financial support	Widowed and her son died	57 years of learning and teaching the Quran
I have a listening and eye problem	A neighbor sent me 2 times of food	Did not marry, I am here alone	spend my life with saber (patience) and shukar
I can't do my work now	used to send me 500 rupees only	husband died 30 years ago	Nothing makes me happy
content with my life There's no quality of life here	She even changed my diapers	am alone in my room	May Allah forgive me
two years here with all these diseases	I have little money left	husband died 2 years ago in a car accident	The effort you put in, Allah rewards you
The heart attack changed me and made me negative	receive phone calls from siblings	wife died 25 years ago	Scared of afterlife
There's a slow-motion movement	siblings send me monthly money	I've never married due to my health history	spend all day doing Zikr and Tasbeeh
fear being bedridden	no special person		complete fasting
My weight is 85kg satisfied with my life nowadays waiting for death Mental support is hard to find		No friends here I am here on my own will	

Arranging the formulated meanings into clusters resulted in 4 themes common in both groups, all the respondents spoke about their life changes that occurred over the years with regards to the quality of life and social support with the addition of loneliness at the later stage and coping mechanism.

Figure 6 below represents the overarching theme.

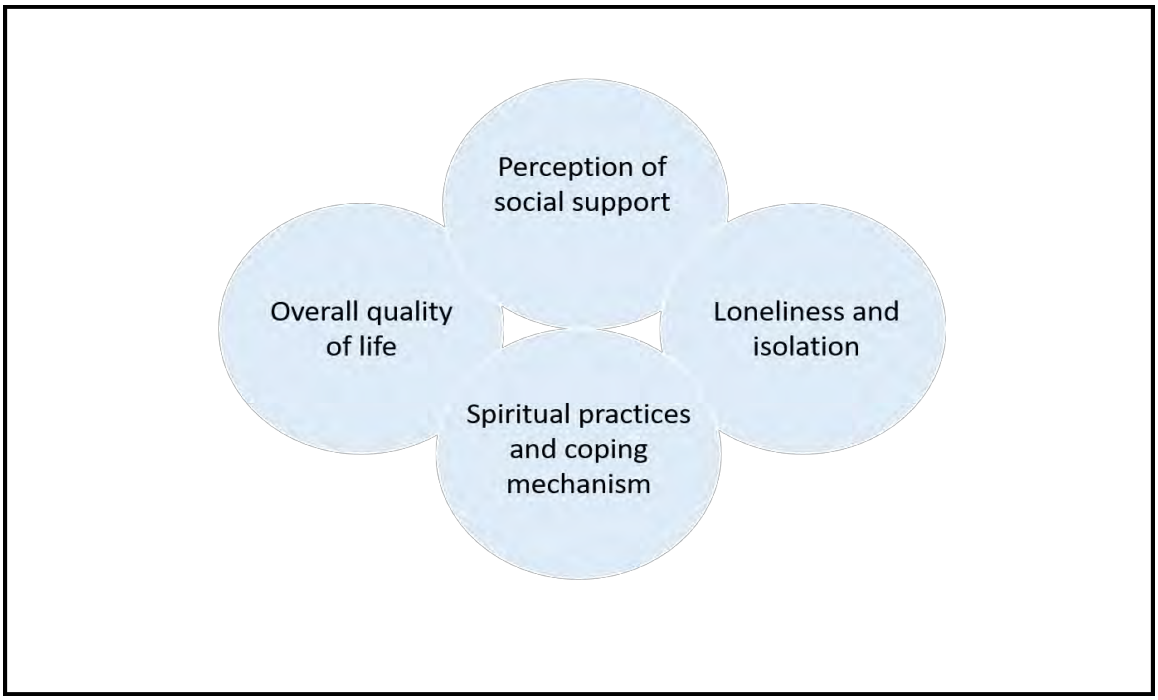

Figure 6 : Overlapped themes

4.4.1 **Overall Quality of Life**

Most of the respondents had an overview regarding their overall quality of life, which includes physical, mental, and emotional well-being regardless of their living arrangements. With growing age older adults have to deal with health challenges and adapt to medical conditions. Most respondents had health issues that stopped them from doing what they liked or used to do. Participant 1 who lives with family, used to be so energetic and tried to participate in every activity, but she said *"Now because of my growing age, my physical health doesn't allow me to do any heavy or energetic work."*

Participant 2, who lives with the family said *"My health doesn't allow me to keep the sacrificial animals because it requires a lot of hard work. It was the only hobby that I had, and I feel happy about it to keep and raise cattle for Eid ul Azha"*. Participant 10, who lives in an old age home said, *"I rest 24/7 as now I can't move much*." In a similar story, Participant 11 also lived in an old age home said, *"Before I do all my work myself you see those sofas I helped them to bring them up but a heart attack made me negative, I can't even move a chair properly moving up and down the stairs is hard for me, I feel pressure in my heart, I have had three heart attacks my weight is 85 kg there is a slow motion movement. I fear being bedridden like others. I hate the hospital."* Few have shown the importance of mental health as Participant 11 lived in an old age home said, *"Mental support is harder to find, despite counseling and medicine being available"*.

However, some participants felt happy and proud of themselves because they could do things on their own, but others felt that their life wasn't as good as it should be. One participant 6 who lives with his family said *that "I am happy and content with my life. I do all the work myself even today. I make my mustache myself."* The combination of these factors showed how physical, emotional, and social well-being interacted, affecting the participant's overall quality of life in many different ways.

4.4.2 Perceptions of Social Support

Social support is the need that everyone wants to live a life, and without social support, it is hard to live. Support is not only limited to financial but also emotional and functional. The interviewees included in my studies from both groups shared diverse, positive, and negative experiences with social support. Participant 1, who lives with her sister-in-law, said *"My sister-in-law and family is my main source of social support she helps me with everyday activities and my nephews send me 10000 rupees from Abu Dhabi every month"* while Participant 3, a widow living with sons, said *"children are my life I share everything with my youngest son he is like my son and my daughter I share my worries and my concern with him"* reveals a strong sense of connection and emotional support she received from them.

Participant 2 who lives with the family said, *"I do have support from my family but I also love to support those around me who are in need I like to support them I don't want to be dependent on anyone"* Most of the participants show that they don't like being dependent on anyone same like the respondent before the other participants 4 who lives with family have also said that *"I don't want to be dependent on anyone I pray that Allah just doesn't make me dependent on anyone"* participant 7 who lives in an old age home she said that *"I am widowed and my son also died I am here on my own will"* participant 10 who lives in old age home share that *"my neighbor come to meet me send me two times of food. She also assisted me with my daily activities"*, which shows the critical role of community support. When asked what kind of support she would like to have she said *"Now I need*

support for medicine I need financial support for medicine" Participant 11 who lives in an old age home said, *"My sibling sends me monthly money".*

Despite the positivity, there were some negative experiences regarding social support in both groups of participants. Participant 5 who lives with her son and daughter in law said in her own words *"I don't receive the support that I want and I just pray to Allah not to make me dependent on anyone"* Participants 12 and 13 who live in an old age home shared some challenges and concerns with their families because there is no one who supports them.

4.4.3 Loneliness and Isolation

As individuals grow older, the challenges of maintaining active social interactions become difficult. This is true and evident among both elderly individuals residing in old age homes, and those with their families. Both groups have faced periods of loneliness and isolation in their lives, impacting their overall well-being.

Participant 1, who lives with family, expressed, "*I feel lonely sometimes because all my brothers and sisters are dead. Sometimes I feel like I don't have anyone to share my feelings. I just live days as it pass by."* The experience of loss and its enduring effect was shared by Participant 5, who expressed, *"Yes, I do feel lonely. I feel like there is no one to share problems with."*

Some participants experience sudden waves of loneliness when reflecting on their past with their spouses or their younger selves. Participant 3 shared, "*I do feel lonely*

sometimes when I think about my husband. I do miss my husband. A life spent with my husband I was the happiest woman" Similarly, Participants 4 and 6 shared the experiences of losing their friends, revealed, "*I don't have a friend",* and *"I don't have any friends. All my best and close friends have died."* Respectively. Such a void is filled by getting support from families. Participant 6 said *"Children are my family and friends"* Among those living in old age homes, feelings of isolation were prominent. Participant 7 reflected on her choice, saying, *"I am here on my own will."* As a widow, she had also lost her only son. The sense of being alone was further emphasized by Participant 8, who disclosed, *"I was a drug addict that is why I did not marry; I work as a caretaker here, I am here alone."* Participant 11 also shared a similar experience, noting*, "I've never married because of my health history"* and further commented, *"There's no special person to share problems with; I used to be a good listener. There's no one for me."*

Tragic circumstances have intensified these feelings. Participant 10 statement expressed this feeling, *"My husband passed away 30 years ago, and I have no friends here."* She further commented on experiencing the loss of her roommate a few months ago, sharing, *"I am alone in my room."*

The stories of loneliness and isolation shared by the participants were deeply personal. They highlighted the significant influence of broken relationships, the absence of a spouse, and the fading of friendships. Such experiences shed light on the need for social connections and emotional bonds, especially during the later stages of life.

4.4.4 Spiritual Coping Mechanisms

Spiritual practices and coping mechanisms emerged as significant themes among the participants, particularly in navigating the challenges of aging and life transitions. Participant 2 revealed his dedication to faith by ensuring he prayed the fajr prayer on time. For Participant 3, who lives with family, engaging in continuous Zikr (remembrance of God) throughout the day became a means of solace and connection with the divine. As he said, *"I wake up at fajr time in the morning and pray fajr at the masjid. I don't have anything to do. I spend my days doing Zikr all day and praying to Allah."* The sentiment of self-reliance was evident in Participant 5's belief who also lives with family shared, *"Spent my time remembering Allah and doing my daily prayers and zikr. And I just pray to Allah not to make me dependent on anyone"*.

Participant 6, mentioned performing the Tahajjud prayer (night prayer) as an integral part of his spiritual routine. He was also a hafiz-e-Quran and spent 57 years learning and teaching Quran, said, *"I mostly don't get sleep at night and then the time of tahajjud comes and I pray tahajjud and then fajr and afterward I sleep after fajr prayer."*

Elderly individuals living in old age homes also shared similar spiritual practices. Participant 10 shared a similar sentiment by expressing the importance of engaging in acts of worship, such as reciting Tasbeeh (prayer beads) and engaging in Zikr. Leaning into their spiritual practices to cope with the daily rhythms of life she said, *"I spend all day doing Zikr and Tasbeeh, I spend my life with sabr (patience) and shukar (gratitude)."*

They find strength in these qualities throughout life's challenges, providing a sense of purpose and connection. However, several participants voiced their hopes for forgiveness and rewards in the hereafter. Participant 10 expressed a plea for Allah's forgiveness. Finally, Participant 11's dedication to maintaining and completing fasting serves as a purpose of spiritual resilience and discipline in the face of challenges related to aging. As he said, *"I'm satisfied with my life nowadays, I am currently trying to finish my fasting"*.

Overall, the accounts of spiritual practices and coping mechanisms showcased how participants turned to their faith as a source of strength, solace, and guidance in navigating the complexities of growing older and facing life's uncertainties.

Phase 2: Quantitative results

4.3 Demographic Characteristics

This study included 80 respondents, 50 living with their families and 30 residing in old-age homes. Among those living with their families, (n=30, 60.0%) were in the age group of 60-69, while among those in old age homes, (n=16, 53.3%) were in the age group of 70-79. The highest marital status among those living with their families was married (n=34, 68.0%), while among those in old-age homes, it was widowed (n=13, 43.3%). The highest educational level among those living with their families was graduate (n=24, 48.0%), while among those in old age homes, it was uneducated (n=13, 43.3%). The highest monthly household income category among those living with their families was

above 1 lac (n=18, 36.0%), while among those living in old age homes, it was "<20,000" (n=29, 96.7%). Among those living with their families, (n=26, 52.0%) reported having chronic medical conditions, while among those living in old age homes, (n=22, 73.3%) reported having chronic medical conditions. A detailed summary of the socio-demographic characteristics of the respondents presented in the table

Table 3 Descriptive Results of Categorical Demographic Variables

Variables	**Old age home (n=30) n (%)**	**Elderly living with family (n=50) n (%)**
Gender		
Male	20 (66.7)	27 (54.0)
Female	10 (33.3)	23 (46.0)
Age groups (years)		
60-69	11 (36.7)	30 (60.0)
70-79	16 (53.3)	17 (34.0)
80 and above	3 (10.0)	3 (6.0)
Marital status		
Married	4 (13.3)	34 (68.0)
Unmarried	11 (36.7)	3 (6.0)
Widowed	13 (43.3)	12 (24.0)
Divorced	2 (6.7)	1 (2.0)
Education		
Uneducated	13 (43.3)	7 (14.0)
Primary school	6 (20.0)	2 (4.0)
Middle school	5 (16.7)	6 (12.0)
Matric	3 (10.0)	4 (8.0)
Intermediate	1 (3.3)	7 (14.0)
Graduate and above	2 (6.7)	24 (48.0)
Monthly income		
<20,000	29 (96.7)	11 (22.0)
21,000-50,000	0	6 (12.0)
51,000-1 lac	0	15 (30.0)
>1 lac above	1 (3.3)	18 (36.0)

Length of stay in current living arrangement		
<1 year	10 (33.3)	3 (6.0)
1-2 years	6 (20.0)	1 (2.0)
3-4 years	6 (20.0)	4 (8.0)
5+ years	8 (26.7)	42 (84.0)
Source of income		
No	20 66.7)	4 (8.0)
Yes	10 (33.3)	46 (92.0)
Chronic medical condition		
No	8 (26.7)	24 (48.0)
Yes	22 (73.3)	26 (52.0)

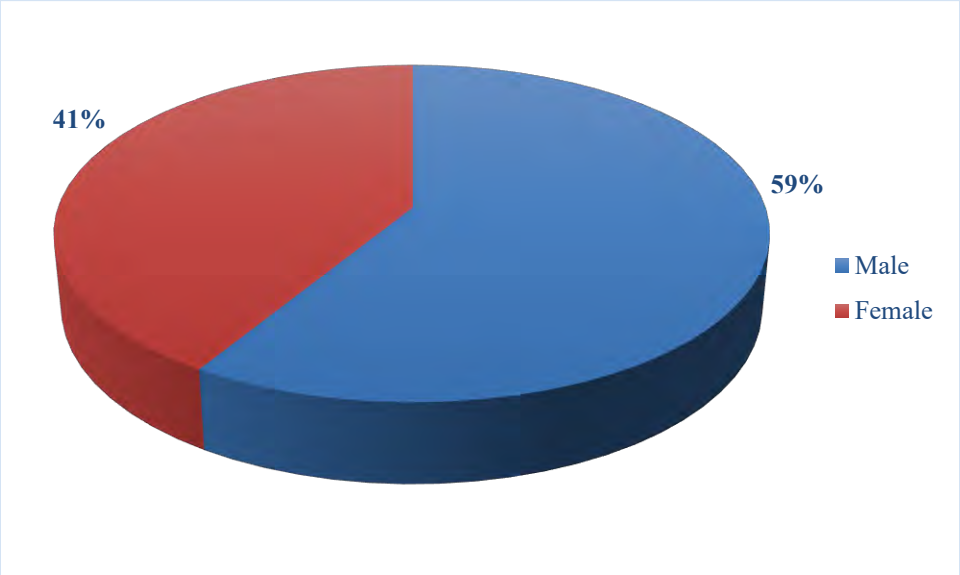

Figure 7: Percentages of gender included in this study

4.4 Descriptive Results of Outcome Variable

Table 4. Mean and Standard Deviation of Computed Variable

Variables	Range	Mean ±S.D
Quality of life-Total	64	62.72±13.816
Perceived Social support-Total	4.67	4.3313±1.18950

The quality of life and social support were assessed using a questionnaire adapted from previous studies. The outcome variables were quality of life and perceived social support of the elderly population. The mean score of the outcome variable was (62.72±13.816 and 4.3313±1.18950) respectively.

4.5 Inferential Results:

4.5.1 Independent Sample t-test results for the association of Quality of life with the Living arrangement:

Table 5: Comparison of quality of life between elderly people living in old age homes and within family setup

Variable	Group		t(df)	p-value
	Old age home (n=30) $\overline{X}$±SD	**Elderly living with families (n=50) $\overline{X}$±SD**		
Sensory abilities	65.42±21.943	72.50±21.354	1.422(78)	0.159
Autonomy	55.21±19.906	63.25±19.911	1.749(78)	0.084
Past, present, and future activities	55.42±12.579	67.00±14.942	3.555(78)	**0.001**
Social interaction	57.92±14.490	65.63±12.193	2.549(78)	**0.013**
Death and dying	70.63±29.045	64.13±27.311	-1.006(78)	0.317
Intimacy	37.08±27.851	64.63±20.069	4.730(47.174)	**0.00002**
Total transformed scores with 24 items (0-100)	56.94±14.234	66.19±12.456	3.045(78)	**0.003**

An independent-sample t-test was conducted to measure the quality of life using the computed score of (WHOQOL-OLD) scale for elderly individuals living with families and those in old-age homes. There were significant differences emerged in the total WHOQOL-old score between the two groups (t(df) = 3.045(78), p = 0.003), with a higher mean score observed among the elderly living with families (M = 66.19, SD = ±12.456) compared to those in old age homes (M = 56.94, SD = ±14.234). This difference was statistically significant, as evidenced by the magnitude of the mean difference (mean difference = 9.243, 95% CI: 3.199 to 15.287).

Table 3 shows a comparison of the facet scores between older adults living in old age homes and those living with their families. Specifically, the elderly living with their family members (64.63±20.069) reported significantly stronger personal relationships and intimacy ($p<0.00002$) compared to those living in old age homes (37.08±27.851). Additionally, statistically significant differences ($p<0.013$, $p<0.001$) were observed in the facet of social interaction and past, present, and future activities (65.63±12.193, 67.00±14.942) when compared to those living in old age homes (57.92±14.490, 55.42±12.579), while no significant differences were observed in sensory abilities, autonomy, and death-related aspects.

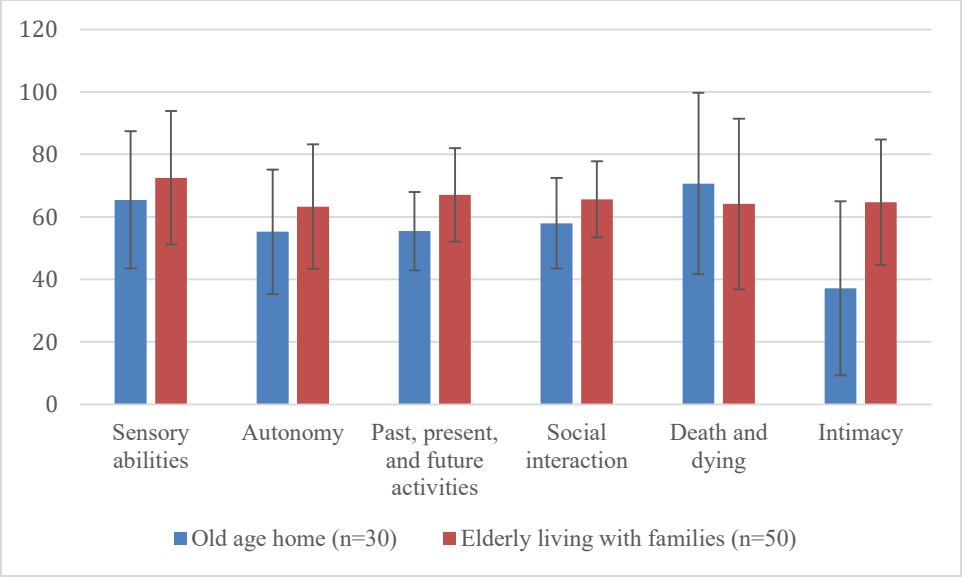

Figure 8: comparisons of WHOQOL-OLD domains between the groups

As shown in Fig. 9, the mean scores were highest in the sensory abilities (69.84±21.714) facet and lowest for the intimacy (54.30±26.732) facet.

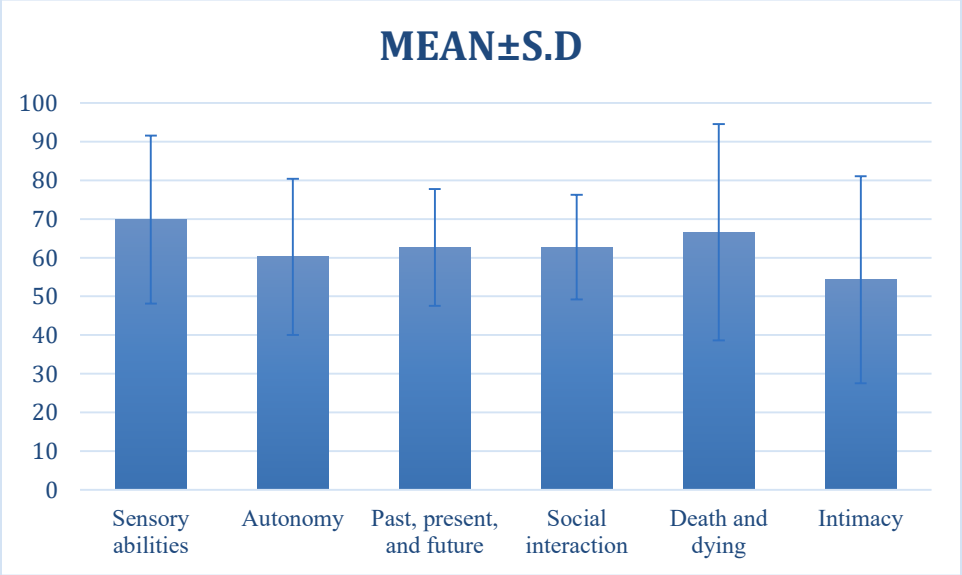

Figure 9 Scores for the facets of the WHOQOL-Old questionnaire among the entire study population; Values are expressed as Mean±SD

4.5.2 Independent Sample t-test results for the association of Perceived Social Support with the Living arrangement:

An independent-sample t-test was conducted to compare perceived social support using the computed score of (MSPSS) scale of elderly individuals living with their families and those in old-age homes. The overall mean of the total MSPSS score was significantly higher among elderly individuals living with families (M = 4.8700, SD = ±0.96732) than among those in old-age homes (M = 3.4333, SD = ±0.96896). This difference was statistically significant, as evidenced by the magnitude of the mean difference (mean difference = 1.43667, 95% CI: 0.99165 to 1.88169).

Table 4 shows a comparison of the domain scores between older adults living in old age homes and those living with their families there were Significant differences were found in all aspects of perceived social support between the two groups., the mean perceived social support scores were significantly higher among elderly individuals living with families (Family: M = 5.2650, SD = ±1.03683; Friend: M = 4.4750, SD = ±1.29091; Significant other: M = 4.8700, SD = ±1.22187) compared to those living in old age homes (Family: M = 3.5833, SD = ±1.19866; Friend: M = 3.3417, SD = ±1.02655; Significant other: M = 3.3750, SD = ±1.19039) The differences were statistically significant, as indicated by the p-values (<.001) for all aspects of perceived social support.

These findings suggest that living arrangements are associated with differences in perceived social support among the elderly. This indicates that the way older adults live affects how much they feel supported by others.

Table 6 Comparison of perceived social support between elderly people living in old age homes and within family setup

Variable	Group		t(df)	p-value
	Old age home (n=30) $\overline{X}$±SD	**Elderly living with families (n=50) $\overline{X}$±SD**		
Family	3.5833±1.19866	5.2650±1.03683	6.621(78)	**<.001**
Friend	3.3417±1.02655	4.4750±1.29091	4.091(78)	**<.001**
Significant other	3.3750±1.19039	4.8700±1.22187	5.349(78)	**<.001**
Total transformed score 12 items (1-7)	3.4333±0.96896	4.8700±0.96732	6.427(78)	**<.001**

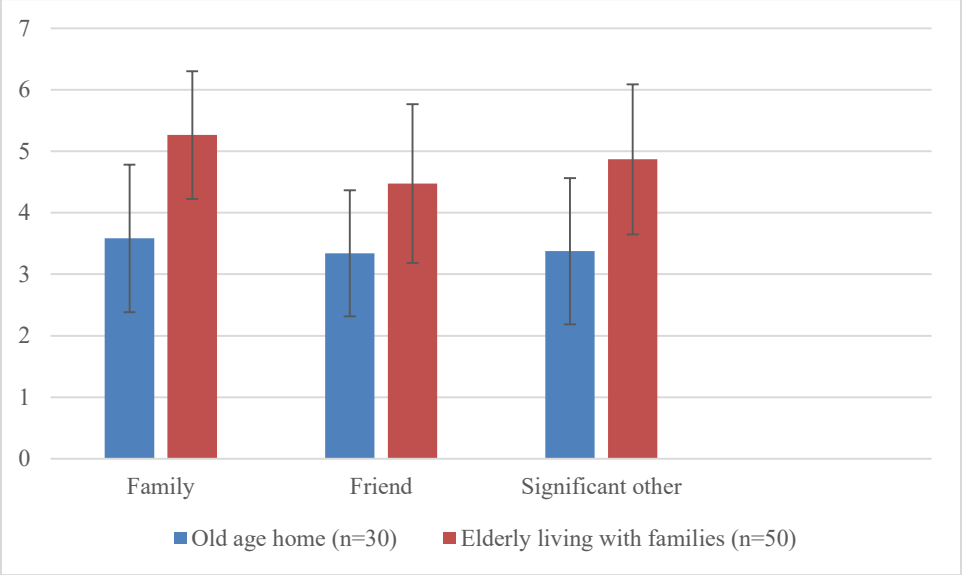

Figure 10 Comparisons of MSPSS domains between the groups

4.5.3 Pearson and Point-biserial Correlation Analysis:

The correlation analysis revealed several significant connections between the variables. There was a negative correlation ($r= -0.302^{**}$, $p<0.006$) between age and monthly income, indicating that older participants tended to have lower incomes, implying that monthly income tended to decrease with age. There was a positive correlation ($r= 0.339^{**}$, $p<0.002$) between gender and marital status, suggesting that gender may influence marital status. There was a negative correlation ($r= -0.648^{**}$, $p<0.0001$) between monthly income and living arrangements, implying that specific living situations may be linked to lower income levels.

Additionally, there was a negative correlation between living arrangements and MSPSS ($r= -0.588^{**}$, $p<0.0001$), indicating a possible association between certain living arrangements and lower levels of social support. Furthermore, living arrangements are negatively correlated with quality of life ($r= -0.326^{**}$, $p<0.0001$). Positive correlations between WHOQOL-OLD and MSPSS suggested that social support may influence participants' perception of life quality ($r= 0.569^{**}$, $p<0.0001$).

Furthermore, a positive correlation existed between education level and both QOL ($r = 0.259$, $p<0.020$) and PSS ($r = 0.537$, $p < 0.0001$). Also, household income and both QOL and PSS were positively correlated ($r= 0.345$, $p<0.002$) and ($r = 0.632$, $p<0.0001$).

In summary, Correlation analysis found significant relationships between education, marital status, living arrangements, household income, perceived social support, and quality of life.

Table 7: Pearson and Point-biserial correlations between the variables included in the study.

	Gender	Marital Status	Education	Living arrangement	Monthly income	any chronic medical conditions	WHOQOL-OLD	MSPSS
Age	-0.023	0.102	**-.264***	0.210	**-.302****	-0.041	-0.191	-0.164
Gender	1	**.339****	-0.074	-0.125	0.013	-0.145	-0.066	0.105
Marital Status		1	**-.433****	**.418****	**-.366****	-0.048	-0.096	**-.320****
Education			1	**-.523****	**.626****	-0.061	**.259***	**.537****
Living arrangement				1	**-.648****	0.211	**-.326****	**-.588****
Monthly income					1	-0.137	**.345****	**.632****
any chronic medical conditions						1	-0.165	-0.036
WHOQOL-OLD							1	**.569****

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

**. Correlation is significant at the 0.01 level (2-tailed). MSPSS, Multidimensional Scale of Perceived Social Support; WHOQOL-OLD, World Health Organization Quality of Life Assessment for Older Adults.

CHAPTER V: DISCUSSION

The present study discusses the qualitative findings related to the research question that directed the study- Part One. The objective was to explore the perception of elderly persons about their quality of life and proceed social support study this study reveals four significant themes related to the quality of life and social support among older adults residing in the Rawalpindi district.

The first theme, Overall Quality of Life, highlighted how physical and emotional well-being interact, and affect the participant's overall quality of life in many different ways. Several of the participants reported a decline in their physical abilities and the inability to participate in the activities that they used to enjoy. This aligns with previous research that suggests a negative correlation between age and physical health (van Ool). Some participants, on the other hand, expressed contentment with their lives and a sense of self-reliance, finding meaning and satisfaction in their daily routines.

The second theme, Perceptions of Social Support, showed that social support is not only limited to financial but also emotional and functional. Lack of support from family can degrade the quality of life of elderly individuals and increase the risk of loneliness and social isolation, meeting the spiritual needs of the elderly, including communication needs such as relationships with others, can help improve their overall well-being (Jadidi et al., 2022). Many older adults living alone reported slight participation in social activities, and their children were the primary source of support (Chen et al., 2014).

The third theme, Loneliness, and Isolation revealed that as individuals grow older, the challenges of maintaining active social interactions become difficult, leading to feelings of loneliness and isolation, and the death of a spouse and children leads to feelings of aloneness. This finding is also supported by a study that showed a negative correlation between perceived social support and loneliness among elderly individuals (Dural et al., 2022). Loneliness has been linked to functional decline in older adults (Perissinotto et al., 2012). According to a study in the district of Gujrat, Pakistan, 80% of elderly informants were ignored by their families, resulting in loneliness (Dildar & Saeed, 2012). Although some of the elder citizens are content and relaxed with their lives, some of them miss their spouses and they sometimes feel lonely when they are on their own.

The fourth theme, Spiritual Coping Mechanisms, showed how participants turned to their faith as a source of strength, solace, and guidance in navigating the complexities of growing older and facing life's uncertainties. Acceptance and contentment with unavoidable social and psychological changes, as well as withdrawal from others in the social system, can lead to life satisfaction (Madigan et al., 1996). A strong association exists between religious beliefs and practices and psychological well-being (Meisenhelder & Chandler, 2002). Religious or spiritual beliefs and practices may provide comfort and support to some older adults during times of disability, psychological distress, and coping with changes and life satisfaction (van Leeuwen et al., 2019).

The present study discusses the findings related to the research questions that directed the study- part two. The results include a description of the socio-demographic variables of

the sample. The data analysis measures the quality of life and perceived social support of the elderly living with families and those residing in an old age home. The chapter then presents Pearson's point of biserial correlation between quality of life, perceived social support, and socio-demographic factors.

A total of 80 older adults participated in the study, 50 living with families (62.5%) and 30 residing in old age homes (37.5%). The present study showed a significant association between the overall quality of life and living arrangements ($p=0.003$). These findings are supported by a study conducted in Lahore on 120 elderly individuals, which reported significant differences in quality of life with the elderly living with their families having a better quality of life than those living in old age homes (Parshad & Tufail, 2014b).

A study conducted in India shows that elderly people living with their families had better social relationships than elderly living in old age homes (Areeckal et al., 2021). The elderly living with their family members (64.63±20.069) reported significantly stronger personal relationships and intimacy (INT) ($p<0.00002$) compared to those living in old age homes (37.08±27.851). Additionally, There were also statistically significant differences in the domains of past, present, and future activities (PPF) ($p=0.001$) and social interaction (SOP) ($p=0.013$).

It is supported and opposed by a similar study conducted in India showed that elderly persons living with their families had better social relationships and social participation compared to those living in old age homes ($p<0.001$), but, in contrast, it also showed that elderly individuals in old age homes had better personal and intimate relationships compared to those living with their families ($p<0.001$) (Areeckal & Arunkumar, 2021).

The current study showed that the mean of the transformed total QoL score (TTS) was (62.72, ± 13.816) with the mean score of facet I (Sensory abilities) being the highest (69.84, ±21.714) followed by facet V Death and dying (66.56, ±27.970) and the lowest for intimacy (54.30, ±26.732). The study conducted in Uttarakhand, India showed that the mean (±SD) of transformed total QoL score (TTS) was (57.76, ±10.97). The highest score was observed in facet V (death and dying) and the lowest was for facet VI intimacy(Kritika et al., 2017). Another similar study was conducted using the WHOQOL-OLD Scale, the highest mean score was in death and dying (83.20), followed by sensory abilities (62.99) and the intimacy domain had the lowest mean score of (22.80) (Bansal et al., 2019). There were no significant differences found in domain sensory abilities, autonomy, and dead and dying domain between old age homes and families in this study.

A current study also found that living arrangements have a significant association with perceived social support among the elderly. It was observed that the elderly living with families have statistically significantly higher perceived social support than their counterparts ($p<0.001$). This result is supported by a previous study done in Lahore that showed significant differences in the level of perception of social support between elderly living in old age homes and those living in intact families (MANZOOR et al.). Individuals with lower perceived social support and connection with others are more likely to have health problems, whereas those with higher perceived support are healthier (Cornwell, 2011). Previous research has supported the fact that social support is correlated with mortality as well as chronic health conditions (Murata et al., 2019).

There were significant differences were found in all domains of perceived social support (MSPSS) between the two groups. The mean perceived social support scores were significantly higher among elderly individuals living with families (Family: M = 5.2650, SD = ±1.03683; Friend: M = 4.4750, SD = ±1.29091; Significant other: M = 4.8700, SD = ±1.22187) compared to those living in old age homes (Family: M = 3.5833, SD = ±1.19866; Friend: M = 3.3417, SD = ±1.02655; Significant other: M = 3.3750, SD = ±1.19039) The differences were statistically significant, as indicated by p-values (<.001) for all aspects of perceived social support. These findings imply that differences in perceived social support among the elderly are associated with living arrangements. This implies that older adults who live alone may feel less supported than those who live with family members. This result is supported by a study conducted in China that found that living arrangements have an impact on life satisfaction among older adults, with social support and meaning playing a role (Lin et al., 2020). The current study adds to this body of knowledge by highlighting the relationship between living arrangements and perceived social support.

Furthermore, the study examined the correlation between quality of life and perceived social support. The results indicated a positive correlation between the two variables($r = 0.569$, $p < 0.0001$), suggesting that higher levels of perceived social support are associated with better quality of life among the elderly. This finding is consistent with previous research conducted in Guilan, which also reported a positive correlation between social support and quality of life for the elderly(Moghadam et al., 2020). The findings of this study highlight the importance of considering the aging population and

their quality of life. The results emphasize the significance of social support in enhancing the well-being of elderly individuals.

The study also found significant correlations between education, marital status, living arrangements, household income, perceived social support, and quality of life, supporting the notion that these factors are interconnected and influence the well-being of elderly individuals. This is supported by a Swiss study that found that higher income, supplemental insurance, and a higher level of education were all associated with better HRQoL among home-dwelling older adults (Siqeca et al., 2022). A study conducted in Egypt backs up this finding. There was a positive and significant relationship between education level, frequency of visits, and overall quality of life (Fathy et al., 2020).

There was a negative correlation ($r= -0.302^{**}$, $p<0.006$) between age and monthly income, indicating that older participants tended to have lower incomes, implying that monthly income tended to decrease with age. As reported by (Hwang et al., 2021) as people get older, their household income decreases regardless of their income level. But in contrast to considering a person's individual traits, the effect of population aging becomes less significant. The income of wealthy individuals goes up.

There was a positive correlation ($r= 0.339^{**}$, $p<0.002$) between gender and marital status, suggesting that gender may influence marital status. The study conducted in China found that middle-aged and older women were found to be more likely to suffer from depression than men, while married middle-aged and older people were found to be less likely to suffer from depression than those who were separated divorced, widowed, or

never married (Zhao et al., 2022). However, the connection between gender and marital status can differ depending on culture and situation.

There was a negative correlation (r= -0.648**, p<0.0001) between monthly income and living arrangements, implying that specific living situations may be linked to lower income levels. This finding is supported by (Martikainen et al., 2008) reported that income and home ownership were independently associated with institutionalization among those living alone or with a partner.

Overall education and financial dependency scores were found to be positively correlated with QOL and social support, and negatively correlated with the living arrangements. These findings were consistent with Kim's (Kim, 2017) discovery that education and household income have an impact on the quality of life of older adults. In this study, the living arrangements were an old age home and with families.

CONCLUSIONS AND WAY FORWARD

6.1 Conclusion

This study found significant differences in WHOQOL-old scores between elderly living with families and those in old age homes. This study indicates that living arrangements significantly influence the perceived social support of the elderly, with Education and financial dependency scores positively correlated with quality of life and social support, and negatively correlated with living arrangements. Future research should investigate these connections and identify effective strategies to improve the quality of life and social support of Pakistan’s aging population.

6.2 Strengths

In the present study, the mixed methods were used to address the research questions comprehensively. The qualitative data provided rich and detailed information about the elderly participants' experiences and perceptions, whereas the quantitative data allowed for statistical analysis and correlations. The study included a diverse sample of elderly people living with families and in old age homes, providing a comprehensive view of the research questions. The study used validated measures to assess quality of life and perceived social support, which increased the findings' reliability and validity.

6.3 Limitations

- The sample size was small, which may limit the generalizability of the findings.
- The study was conducted in a Rawalpindi district, which may limit the findings' generalizability to other regions.
- Recall bias may be another limitation.
- There was a time and resource constraint.
- Two-thirds of old age homes refused to provide access to data collection.

6.4 Recommendation

- Governments should develop policies at the local, national, and international levels to help, protect, and evaluate the quality of life (QOL) and social support of the elderly, and to encourage geriatrics to live healthy lifestyles in their homes and communities throughout their lives.
- Developing effective strategies to improve the quality of life and social support of the aging population:
- Interventions to improve financial independence among the elderly.

  (Government subsidies and assistance, Employment opportunities for seniors, Technology training)
- Programs to promote social support and reduce social isolation.

  (Community engagement initiatives, Technology training for social connection, senior centers and Day programs, Therapeutic pet programs)

- A longitudinal design could be used in future studies to examine changes in quality of life and perceived social support over time.
- Future research could look at other factors that may influence the elderly's quality of life and perceived social support, such as cultural factors or access to healthcare.
- Policymakers should work with old-age homes to increase data collection access. This will help to improve the understanding of the needs and experiences of elderly residents.

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APPENDIX-A QUESTIONNAIRE

Serial No. _____

Quality of Life and Perceived Social Support among elderly people residing in Rawalpindi district: a mixed method study

SECTION A

Part 1: Sociodemographic Information

1. Gender
   ☐ Male ☐ Female
2. Age: _____
3. Marital Status?

☐ Married ☐Unmarried ☐Widowed ☐Divorced

4. Education level?
   ☐Uneducated ☐ Primary school ☐Middle school ☐ Matric ☐Intermediate ☐ Graduate and above
5. Living arrangement?
   ☐With your family ☐in an old age home
6. What is the Monthly Income of a Household?
   ☐ <20,000 ☐21,000-50-000 ☐ 51-000-1lac ☐Above 1lac
7. Length of stay in current living arrangement:
   ☐ < 1 year ☐ 1-2 years ☐3-4 years ☐5+ Above
8. Any source of income?
   ☐YES ☐NO
   8a. If YES: the main source of income
   ☐Pension ☐dependent on children ☐business ☐property ☐own laboring ☐Others _____
9. Do you have any chronic medical conditions?
   ☐Yes ☐No, If Yes, please specify: _____

SECTION B

Part 2: World Health Organization Quality of Life (WHOQOL-OLD) questionnaire
The following questions ask about **how much** you have experienced certain things in the last two weeks.

		Not at all	A little	A moderate	Very much	An extreme amount
1	To what extent do impairments to your senses (e.g. hearing, vision, taste, smell, touch) affect your daily life?	1	2	3	4	5
2	To what extent does a loss of, for example, hearing, vision, taste, smell, or touch affect your ability to participate in activities?	1	2	3	4	5
3	How much freedom do you have to make your own decisions?	1	2	3	4	5
4	To what extent do you feel in control of your future?	1	2	3	4	5
5	How much do you feel that the people around you are respectful of your freedom?	1	2	3	4	5
6	How concerned are you about the way in which you will die?	1	2	3	4	5
7	How much are you afraid of not being able to control your death?	1	2	3	4	5
8	How scared are you of dying?	1	2	3	4	5
9	How much do you fear being in pain before you die?	1	2	3	4	5

The following questions ask about **how completely** you experienced or were able to do certain things in the last two weeks.

10	To what extent do problems with your sensory functioning (e.g. hearing, vision, taste, smell, touch) affect your ability to interact with others?	1	2	3	4	5
11	To what extent are you able to do the things you'd like to do?	1	2	3	4	5
12	To what extent are you satisfied with your opportunities to continue achieving in life?	1	2	3	4	5
13	How much do you feel that you have received the recognition you deserve in life?	1	2	3	4	5
14	To what extent do you feel that you have enough to do each day?	1	2	3	4	5

The following questions ask you to say how **satisfied, happy, or good** you have felt about various aspects of your life over the last two weeks

		Very dissatisfied	Dissatisfied	Neither satisfied nor dissatisfied	satisfied	Very satisfied
15	How satisfied are you with what you have achieved in life?	1	2	3	4	5
16	How satisfied are you with the way you use your time?	1	2	3	4	5
17	How satisfied are you with your level of activity?	1	2	3	4	5
18	How satisfied are you with your opportunity to participate in community activities?	1	2	3	4	5

		Very unhappy	Unhappy	Neither happy nor unhappy	Happy	Very happy
19	How happy are you with the things you are able to look forward to?	1	2	3	4	5

		Very poor	poor	Neither poor nor good	good	Very good
20	How would you rate your sensory functioning (e.g. hearing, vision, taste, smell, touch)?	1	2	3	4	5

The following questions refer to any **intimate relationships** that you may have. Please consider these questions regarding a close partner or another close person with whom you can share intimacy more than with any other person in your life.

		Not at all	A little	A moderate amount	Very much	An extreme amount
21	To what extent do you feel a sense of companionship in your life?	1	2	3	4	5
22	To what extent do you experience love in your life?	1	2	3	4	5
		Not at all	A little	Moderately	Mostly	Completely
23	To what extent do you have opportunities to love?	1	2	3	4	5
24	To what extent do you have opportunities to be loved?	1	2	3	4	5

Section C

Part 3: Multidimensional Scale of Perceived Social Support (MSPSS)

		Very strongly disagree	Strongly disagree	Disagree	Neutral	Agree	Strongly agree	Very strongly agree
1	There is a special person who is around when I am in need.	1	2	3	4	5	6	7
2	There is a special person with whom I can share joys and sorrows	1	2	3	4	5	6	7
3	My family really tries to help me	1	2	3	4	5	6	7
4	I get the emotional help & support I need from my family	1	2	3	4	5	6	7
5	I have a special person who is a real source of comfort to me.	1	2	3	4	5	6	7
6	My friends really try to help me	1	2	3	4	5	6	7
7	I can count on my friends when things go wrong	1	2	3	4	5	6	7
8	I can talk about my problems with my family.	1	2	3	4	5	6	7
9	I have friends with whom I can share my joys and sorrows.	1	2	3	4	5	6	7
10	There is a special person in my life who cares about my feelings	1	2	3	4	5	6	7

11	My family is willing to help me make decisions	1	2	3	4	5	6	7
12	I can talk about my problems with my friends.	1	2	3	4	5	6	7

APPENDIX - B IRB LETTER

AL-SHIFA SCHOOL OF PUBLIC HEALTH
PAKISTAN INSTITUTE OF OPHTHALMOLOGY
AL-SHIFA TRUST, RAWALPINDI

MSPH-IRB/15-02
27st Mar, 2023

TO WHOM IT MAY CONCERN

This is to certify that **Anmol Abdul Malik** D/O **Abdul Malik Choudhry** is a student of Master of Science in Public Health (MSPH) final semester at Al-Shifa School of Public Health, PIO, Al-Shifa Trust Rawalpindi. He/she has to conduct a research project as part of curriculum & compulsory requirement for the award of degree by the Quaid-i-Azam University, Islamabad. His/her research topic, which has already been approved by the Institutional Review Board (IRB), is **"Quality of life and perceived social support among elderly population residing in tehsil Rawalpindi".**

Please provide his/her necessary help and support in completion of the research project. Thank you.

Sincerely,

Dr. Ayesha Babar Kawish
Head
Al-Shifa School of Public Health, PIO
Al-Shifa Trust, Rawalpindi

AL-SHIFA TRUST, JEHLUM ROAD, RAWALPINDI – PAKISTAN
Tel: +92-51-5487820-472 Fax: +92-51-5487827
Email: info@alshifaeye.org, Web Site: www.alshifeye.org

APPENDIX-C CONSENT FORM

I am Anmol Abdul Malik, a student of MSPH- Final Semester, Alshifa School of Public Health, Alshifa Eye Hospital, Rawalpindi. I am researching the "Quality of Life and perceived social support among elderly people residing in Rawalpindi District: a mixed method study".

PURPOSE OF THE RESEARCH

The purpose of this study is to assess the quality of life and perceived social support among elderly people residing in Rawalpindi district, Pakistan.

PARTICIPATION

I do not anticipate that taking this study will contain any risk or inconvenience to you. Your participation is strictly voluntary and you may withdraw your participation at any time without penalty. I request you to answer the questions as honestly as possible. It will take no longer than 20 minutes to complete a questionnaire. All information collected will be used only for my research and will be kept highly confidential. Your identity and your responses will not be identifiable; all data will be stored anonymously.

As this is solely a student project no incentive will be provided. Once the study is completed, I would be happy to share the results with you if you desire. Thank you for agreeing to participate in this study. Your feedback is important.

I have read and understand the information sheet and agree to take part in the study.

Date: _____ **Signature:** _____

APPENDIX-D

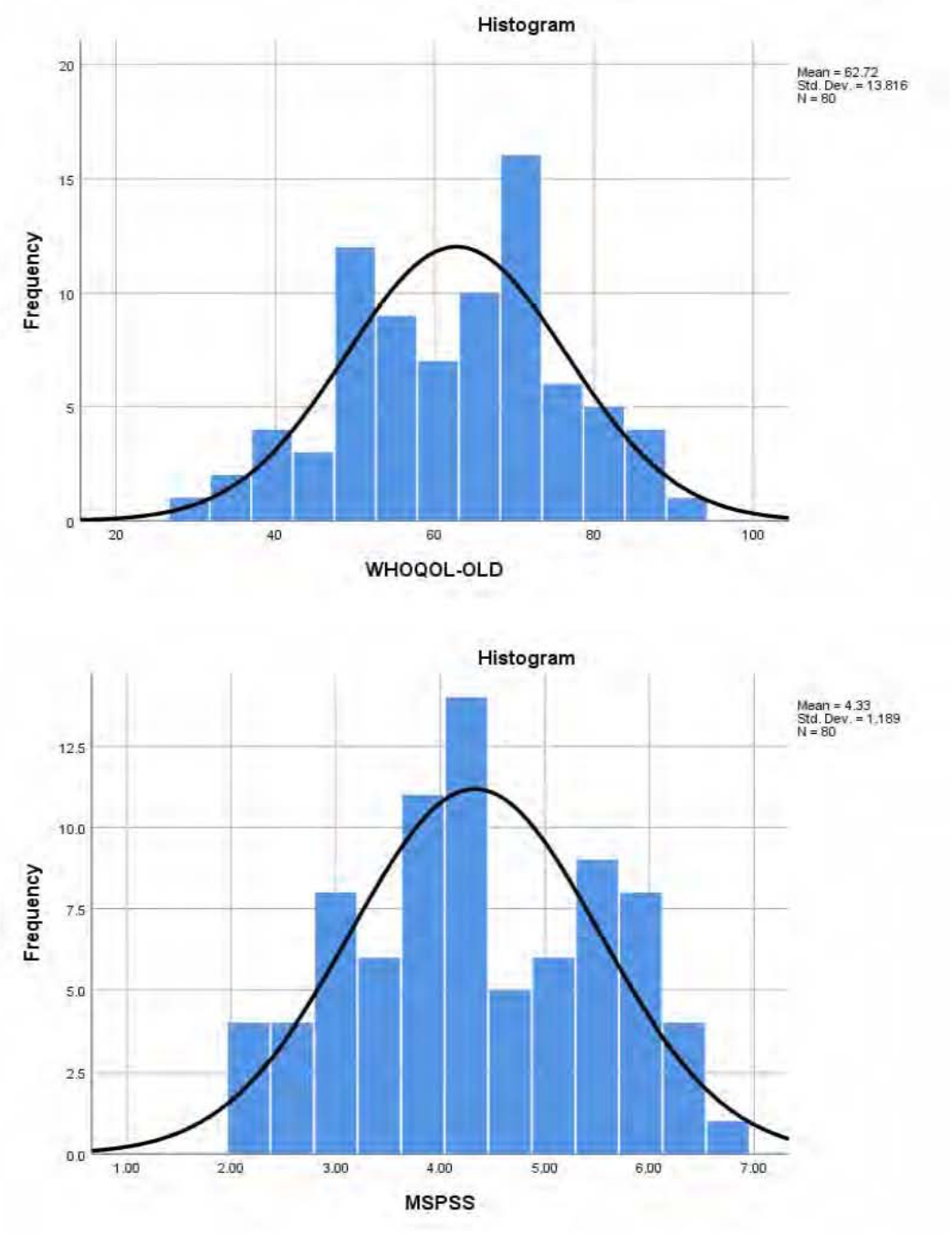

Figure 11 Histogram of computed variables

APPENDIX-E GANTT CHART

Research Plan	March	April	May	June	July	August
Synopsis writing and IRB approval						
Pilot Testing						
Data Collection						
Data Analysis						
Thesis Write-up						
Thesis Submission						

APPENDIX-F BUDGET

Budget Item	Transport	Stationary and internet	Printing	Publishing
Data Collection	Rs.10,000	Rs.2000	Rs.5000	
Thesis Write-up	Rs.1000	Rs.5000	Rs.8000	Rs.25,000
Total Expenditure	Rs.11,000	Rs.7,000	Rs.13,000	Rs.25,000
Grand Total	Rs.56,000			