RELATIONSHIP BETWEEN PERCEIVED SOCIAL SUPPORT AND PSYCHOLOGICAL DISTRESS AMONG GERIATRIC POPULATION



by

Rimsha Mahmood BSP193041

DEPARTMENT OF PSYCHOLOGY Faculty of Management and Social Sciences Capital University of Science & Technology, Islamabad July, 2023

July, 2023

RELATIONSHIP BETWEEN PERCEIVED SOCIAL SUPPORT AND PSYCHOLOGICAL DISTRESS AMONG GERIATRIC POPULATION



by

Rimsha Mahmood BSP193041

A Research Thesis submitted to the DEPARTMENT OF PSYCHOLOGY in partial fulfillment of the requirements for the degree of BACHELOR OF SCIENCE IN PSYCHOLOGY

> Faculty of Management and Social Sciences Capital University of Science & Technology, Islamabad July, 2023

CERTIFICATE OF APPROVAL

It is certified that the Research Thesis titled "Relationship between Perceived Social Support and Psychological Distress among Geriatric Population" carried out by Rimsha Mahmood, Reg. No. BSP193041, under the supervision of Ms. Uzma Mushtaq, Capital University of Science & Technology, Islamabad, is fully adequate, in scope and in quality, as a Research Thesis for the degree of BS Psychology.

Supervisor:

Ms. Uzma Mushtaq Lecturer

Lecturer Department of Psychology Faculty of Management and Social Sciences Capital University of Science & Technology, Islamabad Relationship between Perceived Social Support and Psychological Distress among

Geriatric Population

By

Rimsha Mahmood Registration # BSP193041 Approved By

Supervisor Ms. Uzma Mushtaq

Internal Examiner-I Ms. Sadaf Zeb

101

Internal Examiner-II Mr. M. Naeem

Thesis Coordinator Ms. Irum Noureen

Head of Department Dr. Sabahat Haqqani

Copyright © 2023 by CUST Student

All rights reserved. Reproduction in whole or in part in any form requires the prior written permission of Rimsha Mahmood or designated representative.

DECLARATION

I Rimsha Mahmood, certify that to the best of my knowledge the research work embodied in this thesis, titled "*Relationship between Perceived Social Support and Psychological Distress among Geriatric Population*" was entirely carried out by me Rimsha Mahmood BSP193041 under direct supervision and guidance of Ma'am Uzma Mushtaq from 28th September to 30th December. This work has not been submitted in partial/ complete fulfillment of the award of any other degree from any other institution.

Rimsha Mahmood

BSP193041

June 2023

ACKNOWLEDGMENT

I can't express my enough thanks to ALLAH Almighty for giving me the stamina to carry out my thesis. After that, I would like to thank my supervisor Ms. Uzma Mushtaq for helping me throughout my thesis. I am incredibly fortunate to have had such a knowledgeable and supportive mentor like Ms. Uzma Mushtaq. Her valuable input, constructive critique, and unwavering commitment to my academic development have been instrumental in guiding the direction and improving the overall quality of this thesis. Her insightful feedback has played a central role in shaping the path of my research and enhancing its excellence.

I especially thank my parents. Their unwavering love, prayers, encouragement, help, and belief in my abilities have been my driving force.

The completion of my thesis could not have been accomplished without the support of my friends Zunaira, Amna, Laiba, Zaira, Junaid, and Arooj and my respected teachers Sir Naeem, Mam Maryam, and Mam Irum Noureen.

I would like to thank all those mentioned above for constantly helping me and for their support.

ABSTRACT

This study investigated the relationship between perceived social support and psychological distress among the geriatric population, with a focus on gender differences. A sample of 300 participants aged 50 and above from care homes and communities in Rawalpindi, Pakistan, was surveyed using the Multidimensional Perceived Social Support Scale (MSPSS) and the Depression Anxiety Stress Scale-21 (DASS-21). The results supported the hypothesis that higher levels of perceived social support were associated with lower levels of psychological distress among geriatric individuals. Additionally, individuals who had experienced the separation or death of a spouse exhibited higher levels of psychological distress compared to those who had not undergone such experiences. Moreover, participants living in care homes reported higher levels of psychological distress compared to those living with their families. These findings emphasize the importance of social support in promoting the psychological well-being of older adults and suggest the need for targeted interventions to assist individuals in coping with the emotional challenges associated with spousal loss or separation. The study highlights the significance of perceived social support in mitigating psychological distress among the geriatric population and provides valuable insights for future research and intervention planning.

Key words: Perceived Social Support, Psychological Distress, Geriatric Population

CERTIFICATE OF APPROVAL	·vii
DECLARATION	X
ACKNOWLEDGMENT	xi
ABSTRACT	xii
INTRODUCTION	1
Literature Review	4
Theoretical Framework	8
Rationale	10
Objective	11
Hypothesis	11
Chapter II	12
METHOD	
Research design	12
Ethical considerations	12
Population and sample	12
Sampling Technique	12
Inclusion criteria	12
Exclusion criteria	13
Measures/Instruments	13

Table of Contents

Procedure	13
Data Analysis Procedure	15
Chapter III	16
RESULTS	16
Demographic Characteristics of Sample	16
Reliability of Scales	17
Descriptive Statistics of scales	19
Correlation statistics of scales	20
Mann-Whitney Test	21
DISCUSSION	23
Conclusion	25
Limitations	26
Recommendations/ Implications	26
References	28
Appendices	33
Appendix A	34
Appendix B	48
Appendix C	49
Appendix D	50
Appendix E	51

LIST OF FIGURES

Figure 01 Histogram of MPSS	
Figure 02 Histogram of DASS	

LIST OF TABLES

Table 01 Demographic Characteristics	. 16
Table 02 Reliability of Scales	. 18
Table 03 Descriptive statistics	. 19
Table 04 Correlation statistics	.20
Table 05 Mann-Whitney test	.21

Chapter I

INTRODUCTION

There is growing attention day by day in the effects of low social support and mental health (Wang, 2018). Now days, the concept of joint family system starting to decline because people wants to build their own home environment and prefers privacy as their first priority. In old times people give very much importance to the joint family system and they follow their rituals, values and beliefs. The oldest member of the family used to consider as the head of the family. Head of the family takes the important decisions of family and that decision in that era considered to be the final decision. When importance of joint family system begins to reduce the old members of the family especially those who got retired, they isolate themselves and started feeling loneliness and low self-worth. Older members feel psychologically detached from youngsters and that occurs because they perceive low social support. They started feeling avoided, dependency on young generation and low self-confidence. Older people can't perform their day-to-day tasks or duties by their own and feel isolated (Sil & Roy, 2016). Few studies reported women face more psychological distress then men when they experience low social support in terms of their judgment towards them, avoidance, hostility, and disbelief. Studies depicted that women receive more social support then men in the time of distress (Lepore, 1992).

Perceived Social Support

Perceived Social Support defines as ability to perceive how family, peers and significant others support psychologically, physically and overall support during difficult time. Psychological distress problems arises when older population perceived low self-worth, ignored, isolated, feel dependency on youngsters, feel less hold on home and when

they being shifted into old homes. These Social support problems lead to psychological distress (Rehman & Mohyuddin, 2015).

Negativity has several methods and foundations in social relationships. Social relationships that are challenging can cause through various means like misguiding, low social support, discouraging others, critical remarks, breach other people privacy, interference in other people life, breaking promises etc. there are many other causes that are the cause of negative relationships in society. Older population in now days are facing these problems that causes when they experience rejection, differences in thinking from youngsters, financial problems, dependency on youngsters on their basic life needs and low social support and hold on family and that leads to perceived low social support. Social support also has many methods and foundations for instance it can come from perceived convenience of emotional, physical and financial aid from family, friends and significant others (Baltar, 2022).

Perceived social support is more important in healthy life then the received social support because human not only need support from family, friends and significant others it's not enough for healthy life rather than human wants satisfaction from their close relationships like family, friends and significant others. Satisfaction is the most important aspect if human not feeling satisfactory from what they receive its not matters how much support they receive from society. It would be more beneficial if human remove toxic people from their lives if experiences with them make more negative effect on human's mental health rather than some support. In many studies, women reported more negative social bonds and positive social bonds then men because they spend their most of the tome in home and because of their more emotional or exaggerating nature they experience more

low perceived social support. Also, women more easily get triggered and affected by low social support and feel less satisfaction than men by experiencing more negative and positive social experiences. Studies depicted that woman reported more psychological distress than men because of experiencing toxic social support or low social support given by family, friends, and significant others. There's also evidence that women receive more emotional and physical support when they are in time of stress then men. Older population in our society also perceives low social support when they are being shifted in old homes or care homes because now a days in our society youngsters wants to live their life according to their rules and they want independence and that's why they shift their parents the old members of family into old homes they feel lonely, missed their children's and they don't have much activities to perform their and that's loneliness and dependence leads to psychological distress (Lepore, 1992).

Psychological Distress

Psychological distress is the unpleasant feeling and emotion that people experience when they are unable to cope up with life difficulties and with life stressors. They feel unable to accomplish their day-to-day life tasks. Psychological distress refers to the depression, anxiety and stresses those results from when older people perceived low social support, low self-esteem and ignorance. People reported more social support dissatisfaction around them when they feel emotionally detached from young generation, feel lonely, ignored, disbelief, financial crisis and many other days to days that they can't perform due to physical pain in their body and joints and other aged problems, feel dependent on youngsters and face psychological distress (Santini et al, 2020). When they perceived low social support from their family, friends and significant others they suffer from depression, anxiety and stress (Qadir, 2014). When older people can't adapt social changes, they become a very negative personality and suffer from psychological distress. Social detachment and perceived low social support both can lead to psychological distress. There is another possibility that detachment from social activities can lead to the growth of perceived social support and that results in depression, anxiety and stress or mental health problems in geriatric population. Geriatric population usually experience more psychological distress because of retirement and financial crisis issues, grief, and being widowed directly related to the psychological distress(Tomita, A. et al, 2019).

There are studies that are conducted on perceived Social Support and psychological distress among geriatric population (Tariq, 2020; Seddigh, 2020; Gorenko, 2019; João, 202, Qadir et al., 2014). However, despite the existing body of research on this topic, there is still a significant knowledge gap surrounding the specific impact of death of a spouse in causing psychological distress. While previous studies have explored the general relationship between social support and psychological distress, they have often overlooked the unique circumstances and challenges faced by individuals who have experienced the death of a spouse. There is another aspect that is also not much explored and need more attention to address geriatric population needs that isEither perceived social support in relation to psychological distress among geriatric people who lives in old homes or care homes and who lives with their own family is similar or not. There's a need to shed some light on these aspects among geriatric population in Rawalpindi residence of Pakistan. So basically, in this study the researcher will conduct quantitative research to assess the relationship between perceived Social Support and psychological distress among geriatric

population with the help of questionnaires of Perceived Social Support and psychological distress scale on 300 sample age range of 50 and above to encounter the ambition of this study.

Literature Review

Past studieshave enthusiastic so much attention towards psychological distress among geriatric population. There is evidence that perceived low social support and rejection results in psychological distress in older population. Age, locality, status, education, socioeconomic status plays a role in psychological distress (Joshi et al, 2003). Death of the spouse leads to the perceived low social support, depression, anxiety and stress. People can't make social interactions; they feel isolated and become psychologically distressed (Carr et al, 2003).

According to previous research perceived low social support and psychological distress are linked with increased mortality rates, obesity, physical inactivity and smoking. This study was conducted through longitudinal study to check the relationship between psychological distress and perceived social support. Study was published in 29 may, 2018 to spread awareness about social support and psychological distress. Research depicted that there is also risk of increase in coronary heart disease and stroke, increased blood pressure and chronic pain. Due to increasing number of interests on social support and psychological distress gradually, study was conducted to spread awareness about this issue. Study findings reported that low perceived social support leads to more symptoms of psychological distress, poor recovery and poorer efficient conclusion at follow up among people with depression, anxiety and stress (Wang et al, 2018).

As described above, negative social interactions are more lead to psychological distress then the low social support (Xio, 2022). Negative social interactions refer to the toxic relations that betray people, discourage, misguiding, low social support, discouraging others, critical remarks, breach other people privacy, interference in other people life, breaking promises etc. they all more contribute in cause of psychological distress then the low social support by the family, friends and significant others. Research indicated that those friends, spouses, and family members provides social support and materialistic support and physical support to people they reported low psychological distress as compared to those friends, spouses, and family members that don't provide any type of social, physical, emotional and financial support reported greater psychological distress. Mortality, illness and other major health outcomes are directly related to low perceived social support. This study is conducted to provide future researchers help in intervention planning and inform about social work practices that can used to solve these problems. This study was conducted through the use of correlational study designs and published in 1 June, 2014. Study findings depicted those negative social interactions major lead to psychological distress and more harmful than low social support (Lincolon et al, 2014).

The past researches demonstrate significant and positive correlation between loneliness, self-esteem, sleep quality, daily life activities and psychological distress older people of different communities and care homes because they don't receive any kind of social and emotional support and they face low perceived social support that results in these problems. They don't have more daily life activities in this age and because of loneliness and low social support they feel lonely all the time and suffer from depression, anxiety and stress.Older population doesn't have much daily life activities at this age. Due to loneliness and low social support, they suffer from psychological distress (Yeo et al, 2022; Lee, 2022; Baltar, 2022; Goncalves et al, 2022).

As described earlier geriatric population mostly more suffer from depression, anxiety and stress because of low social support from family, peers and significant others if they use coping strategies for less perceived social support or in difficult situation, they result in less psychological distress. According to 2019 article by Zautra et al and Shao et al conducted a study on older adults that states that coping efforts leads to satisfaction in life or less psychological distress who continuously try to cope up with difficult situation and those who don't try to cope up with social adjustment problems they result in high psychological distress (Zautra et al, 2013; Shao et al, 2019).

According to past research having social support of family, friends and significant others is not enough but having the belief on having social support and satisfaction regarding to it is more important and it leads to good psychological health. Social support provides strength to the people to come up with difficult life situations and stressful situations and its providing advantage to people to reduce psychological distress. This study is conducted to examine the effect size of the relationship between social support and mental health in the country of Iran. Study was conducted through meta-analysis and published in the year of September 9, 2022 (Harandi etal, 2017).

Research studies have indeed suggested that older adults living in care homes may experience higher levels of psychological distress compared to those living with their families. Older adults living in care homes reported lower levels of social support and a diminished sense of belonging compared to those living with their families. Reduced social interactions and limited contact with loved ones can lead to feelings of loneliness, isolation, and psychological distress. Care home residents often experience a loss of autonomy and control over their daily lives. Environmental factors in care homes, such as noise, lack of privacy, and restricted personal space, as potential stressors for older adults. These factors can create an overwhelming and disruptive living environment, leading to increased psychological distress. Care homes often struggle to provide individualized care due to limited resources and staff-to-resident ratios. Older adults may feel neglected or perceive a lack of personal attention, which can also contribute to psychological distress and a decline in mental well-being. Moving from a familiar home environment to a care home can disrupt older adults' established routines and sense of familiarity. This upheaval may lead to feelings of disorientation, anxiety, and an increased risk of psychological distress (Dahlberg et al., 2009; McGilton et al., 2012;Lai et al., 2011; Kuske et al., 2016).

Research studies have indeed indicated that death of spouse can influence the psychological distress experienced by older adults. The marital status of older people has been associated with various factors that impact their mental well-being. Married older adults tend to have higher levels of social support and companionship compared to those who are single, divorced, or widowed. Social support plays a crucial role in buffering against psychological distress, as it provides emotional, instrumental, and informational resources. Being married or in a committed partnership is associated with better health and well-being outcomes among older adults. Better physical health and overall well-being can serve as protective factors against psychological distress. Married older adults generally experience higher emotional stability and intimacy, which can contribute to reduced psychological distress. The emotional bond and support provided by a spouse can help individuals cope with stressors and promote overall mental well-being. Role of economic

resources and financial security also plays role in the psychological well-being of older adults. Being married can provide greater financial stability and access to resources, which can alleviate stress related to financial concerns and reduce psychological distress. Studies have shown that the loss of a spouse through widowhood can significantly increase the risk of psychological distress among older adults. The absence of a long-term partner can lead to feelings of loneliness, grief, and a higher vulnerability to mental health problems (Coyle & Dugan, 2012; Umberson et al., 2006; Bookwala, 2009; Li & Ferraro, 2006;Carr et al., 2000).

Theoretical Framework

Resilience theory proposed by Norman Garmezy's in 1991. This theory provides three types of protective factors; Individualities, relationships with the family and peers, and significant others. Resilience theory gives attention on social support, family and peer relationships with people that influence psychological functioning. If individual perceive low social support, then it will disrupt psychological functioning and can cause psychological distress. The main factor of this theory is the individual intelligence level and the personality that plays an essential role in how individual cope up with the life difficulties and stressful situations by themselves. It refers to the individual own willpower to face stressful situations that how individual deal with them by using their cognitive ability and will power. Personality and the intelligence level vary person to person and that's why some individual easily tackle the stressful situations and some individual can't handle those situations and become psychologically distress. Second factor of this theory is the family support that also plays a very significant role in developing psychological distress. Family support refers to the support that family members give to each other in the time of crisis and difficulty. Support has forms like emotional support, physical support, materialistic support the family provides. If family members provide individual an enough support in the form of emotional, physical and financial according to the need of individual at that time they can safe individual from developing psychological distress and individual can live healthy life. And if family don't give any type of support and individual face the stressors of their life alone and perceived low social support that can lead to psychological distress. Last and the third factor of this resilience theory is the significant others support. Significant others include peers, neighbors, and the people that are close to individual and that can influence the individual well-being. Support of significant others also important for the individual that are facing stressful situations and these people support also effects individual mental health because these people also important for the individual. Individual who is facing stress and worries also needs support from external sources that includes significant others that can provide physical, emotional and materialistic support to individual at the time of their crisis. Resilience theory considers the intelligence level of individual and will-power of individual to cop up with difficult times matters most (Garmezy's, 1991)



Rationale

Social support satisfaction plays an important role in opposition to psychological distress. However, many studies show relation between social support and psychological distress (Tariq, 2020; Seddigh, 2020; Gorenko, 2019; João, 202, Qadir et al., 2014). However, despite the existing body of research on this topic, there is still a significant knowledge gap surrounding the specific impact of death of a spouse in causing psychological distress. While previous studies have explored the general relationship between social support and psychological distress, they have often overlooked the unique circumstances and challenges faced by individuals who have experienced the death of a spouse. This is a crucial aspect that warrants further investigation and understanding, as it has the potential to shed light on the specific mechanisms through which social support influences psychological well-being in these particular situations. This study will also examine the perceived social support in relation to psychological distress among geriatric people who lives in old homes or care homes and who lives with their own family is similar or not. This study will psych educate normal population about difficulties face by older population in this society and will guide future researchers and community workers about on which factor we should focus on to reduce psychological distress. This research is important because through the findings of this research researcherscan advance the field's understanding of the complexities of these experiences and contribute to the development of targeted interventions and support systems for individuals navigating through such challenging life events.

Objective

- 1. To assess the relationship between perceived social support and psychological distress among geriatric population.
- **2.** To find out the correlation between death of a spouse and psychological distress among the geriatric population.
- **3.** To examine and contrast the levels of psychological distress in individuals residing in care homes versus those residing in their own homes.

Hypothesis

H1: There is a negative relationship between Perceived Social Support and psychological distress.

H2: There is a positive relationship among death of spouse and the psychological distress.

H3: Individuals living in care homes experiences a higher level of psychological distress compared to individuals living in their own homes.

Chapter II

METHOD

Research design

The Correlational research design was used to find out the relationship between perceived social support and psychological distress among geriatric population.

Ethical considerations

The study was conducted under the supervision of thesis supervisor of Capital University of Science and Technology. Informed consent will be given to the participants. Confidentiality of the participants was ensured that your data will be kept confidential and will only be used for research purpose. All participants were had the chance to withdraw from research if they feel any insecurity. Permissions to use the scale were taken through email with respective authors.

Population and sample

The sample size was 300 taken from care homes and communities located in Rawalpindi residence.

Sampling Technique

In this study data was collected through the use of convenience sampling technique.

Inclusion criteria

• Age range of 50 and above was considered geriatric population.

• People who can understand Urdu language was the part of this study.

Exclusion criteria

• The participants who had severe illnesses issues were excluded from study.

Measures/Instruments

Following instruments were used;

Multidimensional Perceived Social Support scale

The Multidimensional Perceived Social Support Scale (MSPSS) was developed by Zimet, Dahlem, Zimet, and Farley in 1988. Its primary purpose is to assess an individual's perceived social support from three different sources: family, friends, and significant others. The scale is designed to measure the extent to which individuals believe they have support available to them in various social relationships. MSPSS consists of 12 items, with four items assessing perceived social support from each of the three sources (family, friends, and significant others). Each item is rated on a 7-point Likert scale, ranging from 1 (very strongly disagree) to 7 (very strongly agree).

The scores for the 12 items are summed, resulting in a total score that can range from 12 to 84. Higher scores indicate a higher perceived level of social support. MSPSS has demonstrated good internal consistency, with a reliability coefficient of 0.91, indicating that it consistently measures the construct of perceived social support.

DASS-21 scale

The Depression, Anxiety, and Stress Scale (DASS-21) is a shorter version of the original DASS-42 scale and was developed by Dr. Naeem Aslam in 2017. The DASS-21

is a widely used self-report measure designed to assess the severity of symptoms related to depression, anxiety, and stress. DASS-21 consists of 21 items, with seven items dedicated to each of the three subscales: depression, anxiety, and stress. Respondents are required to rate the frequency and severity of their symptoms over the past week on a 4-point Likert scale. Each item is scored from 0 to 3, indicating the level of symptom severity (0 = Did not apply to me at all, 3 = Applied to me very much or most of the time). The scores for each subscale are summed separately, yielding three subscale scores, with a maximum possible score of 21 for each subscale. The DASS-21 has demonstrated excellent internal consistency, with a reliability coefficient of 0.93, indicating high consistency in measuring depression, anxiety, and stress symptoms.

Procedure

In this correlational study, permission was taken from university authority to reach participants lived in Rawalpindi residence. Permission from care homes and from community participants was also taken to collect than data was collected after briefly explain the importance of the study and ensure the subject that their data was only used for research purposes from geriatric people with sample of 300 through visiting Rawalpindi care homes and communities of Rawalpindi. Two scales MPSS and DASS was used in this study to assess perceived social support and psychological distress from participants. Also, take the sign on informed consent which indicates that participants can withdraw from the study any time if they want. MSPSS and DASS-21 scale was used and data was analyzed by using IBM SPSS-21.

Data Analysis Procedure

Statistical Package for Social Sciences (SPSS version 2021) was used for quantitative analysis. Before analysis, data was entered in SPSS. After that data was cleaned.

For the distribution of data, descriptive statistics were used. Frequency and Percentages were calculated for mean, median, mode, standard deviation, skewness and kurtosis. To check normal distribution of data; value of skewness, kurtosis, normality test and histogram were used for normality testing.

To examine the reliabilities of MPSS and DASS by calculating Cronbach's Alpha (α) Inferential Statistics were computed. Spearman Correlation was calculated to see the relationship between the independent variable (perceived social support) and the dependent variable (psychological distress) and also used to find out the relationship between marital status and psychological distress.Mann-Whitney U test used to investigate the levels of psychological distress between individuals living in care homes and those living in their own homes.

Chapter III

RESULTS

The study analyzed the comparison of perceived social support and psychological distress among geriatric population. This chapter contains the demographics characteristics, descriptive statistics of study variables, Cronbach alpha (α) reliability and results for testing hypothesis are also interpreted here.

Demographic Characteristics of Sample

In current study, the categorical demographic variables are gender, marital status, job status, and living status. Continuous variable i.e. age is also presented here.

The following table below summarizes the demographic composition of the sample.

Table 01

_

Frequencies (f) and percentages (%) of demographic characteristics in terms of age, gender, marital status, job status and marital status (N = 300)

Variables	Categories	f	%	
Gender				
	Male	171	57.0	
	Female	128	42.7	

Marital Status

	Married	55	18.3
	Unmarried	22	7.3
	Death of spouse	52	17.3
	Separation/divorced	171	57.0
Living status			
	Live with family	139	46.3
	Live in care home	161	53.7
Job status			
	Employed	67	22.3
	Unemployed	183	61.0
	Retired	50	16.7

Note. f= Frequency, %= Percentage, *no missing values

The age range of my sample for the study was 50 years and above. The mean age was 57.86 years, median was 56 years and mode was 55 years. The values for skewness, kurtosis and standard deviation of age were 1.59, 3.80 and 7.21 respectively.

Reliability of Scales

For the purpose of calculating reliabilities of the scales used Cronbach's Alpha reliability test (α) was applied.

Table 02

Cronbach's Alpha Coefficients of scales (N = 300)

Scales	Items	М	SD	α	Range		kurtosis	Skewness
					Potential	Actual	_	
MPSS	12	39.99	29.28	0.969	0-84	12-154	948	.509
DASS	21	32.49	24.39	0.839	0-63	0-171	1.703	.501

Note. MPSS= Multidimensional Perceived Social Support, DASS= Depression Anxiety

Stress Scale, M= Mean, SD= Standard Deviation, α = Cronbach Alpha

Table 02 shows both scales demonstrate good reliability. Kurtosis indicates the distribution on DASS scale is leptokurtic; relatively peaked distribution relatively to normal distribution and skewness indicates slightly positively skewed distribution. Kurtosis indicated the distribution MPSS scale is platykurtic; relatively flat distribution relatively to normal distribution and skewness slightly positively skewed distribution.

Descriptive Statistics of scales

This section contains descriptive statistics of the scales being engaged in this study.

Table 03

Descriptive of MPSS and DASS scales used in study (N = 300)

Scales	М	Median	Mode	SD	Skewness	Kurtosis k	X-S
MPSS	39.99	29.00	12.00	29.28	.509	948	.000
DASS	32.49	34.00	.00	24.39	.501	1.703	.000

Note. MPSS= Multidimensional Perceived Social Support, DASS= Depression Anxiety

Stress Scale, M= Mean, SD= Standard Deviation

Table 03 shows mean median, mode and SD in the study variable. The value of skewness and kurtosis of both scales demonstrates non normal distribution of data. Value of K-S also demonstrates non normal distribution of data because K-S value is less than 0.05.

Correlation statistics of scales

This section shows the relationship between MPSS and DASS, and MS and DASS.

Table 04

Relationship between MPSS and DASS (N = 300)

Variables	Ν	1	2	3
MPSS	300	-	880**	•
DASS	300	-	-	-
DS	300	-	.309**	-

Note. MPSS= Multidimensional Perceived Social Support, DASS= Depression Anxiety

Stress Scale,DS= Death of Spouse, N= Number of population

Table 04 shows a very strong and significant strong negative relationship between MSPSS and DASS. However, there's statistically significant moderate positive correlation between DS and DASS.

Mann-Whitney Test

This section shows the comparison between LS and DASS

Table 05

Comparison of study variables with population who live in community and in care homes

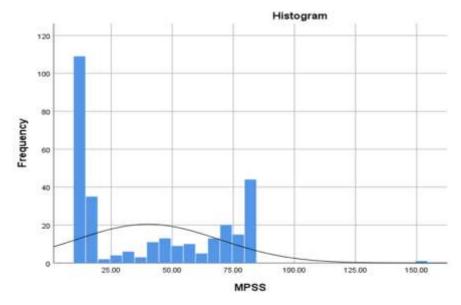
(N = 300)

	Community		Care home			
Variables	Ν	Mean	N	Mean	U	Р
LS	139	78.99	161	212.24	1250.00	.00

Note. N = No of population, p < 0.01

Table revealed that there is a statistically significant difference in living status between community (Mean=78.99, N= 139) and care home (Mean= 212.24, N=161) U= 1250.00, p < .001.

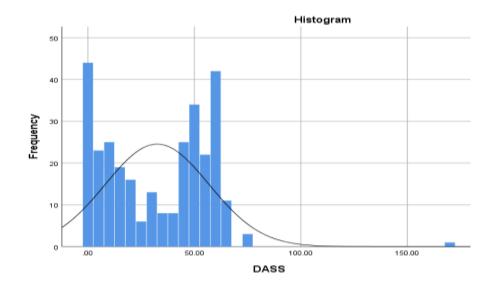
Figure 01



Histogram of Multidimensional Perceived Social Support Scale

Figure 02

Histogram of DASS



Chapter IV

DISCUSSION

The present study aimed to explore the relationship between perceived social support and psychological distress among geriatric populations, with a particular focus on gender differences. The findings of this study contribute to the existing literature on the psychological well-being of older adults and shed light on the importance of social support in mitigating psychological distress. MSPSS scale was used in this study to measure the perceived social support among geriatric population. The reliability of MSPSS scale is 0.987 which contains 12 items. This scale was commonly being used in many studies that were conducted in Pakistan to assess the multidimensional nature of social support (Ahmed, W., 2019; Tariq, S., 2020, Jabeen, M., & Bano, R., 2019). Other scale that was used in this study is DASS to measure psychological distress of geriatric population. The reliability of DASS scale is 0.984 which contains 21 items. This scale was commonly being used in many studies that were conducted in Pakistan to assess the psychological distress assess symptoms of depression, anxiety, and stress in different populations. The scale has helped researchers gain insights into the mental health challenges faced by various groups in the Pakistani context (Zahid, M., & Emad, Y., 2020; Khan, F. et al., 2021; Rafique, R., & Shaikh, B., 2018).

Total population of this study was 300 from which 171 were males and 128 were females. Age of the participants was above 50. Living status of participants was being categorized into two categories like live with family and live in care home from which 139 people were those who were living with their families and 161 people were living in the care homes. Marital status of the participants were categorized into four categories like married, unmarried, death of spouse, and separation/divorced. In which 55 were married, 22 were unmarried, 52 participant's spouses were dead, and the 171 were those who was separated or divorced. Job status of participants were divided into three categories from which employed were 67, unemployed were 183 and retired participants were 50. Hypotheses were formulated based on existing literature and were tested using various statistical analyses.

The first hypothesis stated that there is a negative relationship between perceived social support and psychological distress. The results of the study confirmed this hypothesis, indicating that higher levels of perceived social support were associated with lower levels of psychological distress among geriatric individuals. This finding aligns with previous research that has consistently demonstrated the positive impact of social support on mental health outcomes (Wang et al., 2018; Harandi et al., 2017). It suggests that individuals who perceive higher levels of support from family, friends, and significant others are more likely to experience better psychological well-being and have effective coping mechanisms to deal with life stressors.

The second hypothesis, which proposed that individuals who have experienced the death of a spouse exhibit higher levels of psychological distress compared to those who have not undergone such experiences, was also supported by the study findings. This is consistent with previous research that has highlighted the significant impact of spousal loss or separation on mental health outcomes (Ross, C., 1995). The death of a spouse often leads to feelings of loneliness, isolation, and grief, which can contribute to increased psychological distress. These findings underscore the need for targeted support and interventions to assist individuals in coping with the emotional challenges associated with

spousal loss or separation. The results of this study emphasize the importance of social support in promoting the psychological well-being of older adults. Perceived social support serves as a protective factor against psychological distress by providing emotional, physical, and financial aid during difficult times (Rehman &Mohyuddin, 2015). The findings support the resilience theory proposed by Garmezy's (1991), which suggests that individual and social factors, including social support from family and significant others, play a crucial role in shaping psychological functioning.

The third hypothesis examined the levels of psychological distress between individuals living in care homes and those living in their own homes. The results of the study revealed that individuals living in care homes experienced higher levels of psychological distress compared to those living in their own homes. This finding is consistent with previous research indicating that older adults residing in care homes or institutional settings are more susceptible to psychological distress due to factors such as limited social interactions, reduced autonomy, and feelings of loneliness or abandonment (Qadir et al., 2014). It highlights the importance of considering the living arrangements of older adults when assessing their psychological well-being and designing appropriate support systems.

Conclusion

The present study highlights the significance of perceived social support in mitigating psychological distress among geriatric populations. The findings underscore the need for interventions and support services that foster social support networks for older adults. Enhancing social connections and strengthening familial bonds can contribute to the psychological well-being of older adults and improve their overall quality of life. Future research should continue to explore the complex interplay between social support, gender, and psychological distress to develop targeted interventions that address the unique needs of older adults in different cultural contexts.

Limitations

- 1. The research design was correlational, which limits the ability to establish causal relationships between perceived social support and psychological distress.
- The study focused on a specific geographic area and may not be representative of the entire geriatric population in Pakistan. Generalization of the findings should be done with caution.

Recommendations/Implications

- Findings of this study provide the baseline for the future researchers in intervention planning for geriatric population who are facing psychological distress due to perceived low social support.
- 2. Via recognizing the importance of social support, healthcare professionals, caregivers, and policymakers can develop strategies to enhance the social support networks of older adults. This may involve strengthening familial bonds, encouraging community engagement, and providing resources to facilitate social connections. Creating a supportive environment that addresses the unique needs of older adults can contribute to their overall well-being and reduce the risk of psychological distress.

- 3. Future studies could utilize longitudinal or experimental designs to gain a better understanding of the temporal and causal nature of these associations.
- 4. It is recommended to replicate this study in different regions and cultures to examine the universality of the relationship between social support, gender, and psychological distress among older adults.

References

- Wang, J. (2018). Associations between loneliness and perceived social support and outcomes of mental health problems: a systematic review. *Boston Medical Center psychiatry*, 18(1), 1-16.
- Sil, P., & Roy, G. S. (2016). An analysis of social adjustment among old age people of Bengal. Int J Physical Educate, Sports Health, 3(2), 145-147.
- Lepore, S. J. (1992). Social conflict, social support, and psychological distress: evidence of cross-domain buffering effects. *Journal of Personality and Social Psychology*, 63(5), 857.
- Rehman, I., & Mohyuddin, A. (2015). Social issues of senior citizens. The Explorer Islamabad: *Journal of Social Sciences*, 8(1), 301-306.
- Santini, Z. I., Jose, P. E., Cornwell, E. Y., Koyanagi, A., Nielsen, L., Hinrichsen, C., ... &Koushede, V. (2020). Social disconnectedness, perceived isolation, and symptoms of depression and anxiety among older Americans (NSHAP): a longitudinal mediation analysis. *The Lancet Public Health*, 5(1), e62-e70.
- Qadir, F. et al., (2014). A pilot study of depression among older people in Rawalpindi, Pakistan. *Boston Medical CenterResearch Notes*, 7(1), 1-9.
- Carr, D. et al (2003). A" good death" for whom? Quality of spouse's death and psychological distress among older widowed persons. *Journal of Health and Social Behavior*, 215-232.
- Lincoln, K. D. (2000). Social support, negative social interactions, and psychological wellbeing. *Social Service Review*, 74(2), 231-252.

- Bøen, H. et al., (2012). The importance of social support in the associations between psychological distress and somatic health problems and socio-economic factors among older adults living at home: a cross sectional study. *Boston Medical Center Geriatrics, 12*(1), 1-12.
- Yeo, L. H. W. et al. (2022). Does gender matter to promote mental health through community engagement among older adults? *Aging & Mental Health*, 26(1), 186-195.
- Lee, M. Y. et al. (2022). Psychosocial stress, self-esteem, and social adjustment: A moderated mediation analysis in Taiwanese adolescents with Tourette syndrome. *Journal of Pediatric Nursing*, 62, e84-e90.
- Losada-Baltar, A. et al. (2022). Longitudinal correlates of loneliness and psychological distress during the lockdown situation due to COVID-19. Effects of age and self-perceptions of aging. *The Journals of Gerontology: Series B*, 77(4), 652-660.
- Ribeiro-Gonçalves, J. A. et al. (2022). Loneliness, social support, and adjustment to aging in older Portuguese gay men. *Sexuality Research and Social Policy*, *19*(1), 207-219.
- Xiao, J., (2018). Relationship between resilience, social support as well as anxiety/depression of lung cancer patients: a cross-sectional observation study. *Journal of Cancer Research and Therapeutics*, 14(1), 72.
- Sturgeon, J. A., &Zautra, A. J. (2013). Psychological resilience, pain catastrophizing, and positive emotions: perspectives on comprehensive modeling of individual pain adaptation. *Current pain and Headache Reports*, 17(3), 1-9.

- Shao, J., et al (2020). The role of social support and emotional exhaustion in the association between work-family conflict and anxiety symptoms among female medical staff:
 a moderated mediation model. *Boston Medical Center psychiatry*,20(1), 1-9.
- Harandi, T. F., (2017). The correlation of social support with mental health: A metaanalysis. *Electronic physician*, 9(9), 5212.
- Drapeau, A. et al. (2014). Gender differences in the age-cohort distribution of psychological distress in Canadian adults: findings from a national longitudinal survey. *Boston Medical Center Psychology*, 2(1), 1-13.
- Matud, M. P. (2004). Gender differences in stress and coping styles. *Personality and Individual Differences*, 37(7), 1401-1415.
- Drapeau, & Beaulieu-Prévost, (2012). Epidemiology of psychological distress. *Mental Illnesses-Understanding, Prediction and Control, 69*(2), 105-106.
- Tariq, et al. (2020). Role of perceived social support on the association between physical disability and symptoms of depression in senior citizens of Pakistan. *International Journal of Environmental Research and Public Health*, 17(5), 1485.
- Seddigh, (2020). A comparative study of perceived social support and depression among elderly members of senior day centers, elderly residents in nursing homes, and elderly living at home. *Iranian Journal of Nursing and Midwifery Research*, 25(2), 160.
- Gorenko, J. A. et al. (2021). Social isolation and psychological distress among older adults related to COVID-19: a narrative review of remotely-delivered interventions and recommendations. *Journal of Applied Gerontology*, *40*(1), 3-13.

- João, C., (2022). Screening for Depression, Anxiety, and Stress in the initial and middle stages of the COVID-19 pandemic in a university's community in the Mid-West Brazil, 2020. *Research, Society and Development, 11*(12), e17111233588e17111233588.
- Drapeau, A., Beaulieu-Prévost, D., Marchand, A., Boyer, R., Préville, M., &Kairouz, S. (2010). A life-course and time perspective on the construct validity of psychological distress in women and men. Measurement invariance of the K6 across gender. *Boston Medical Center Medical Research Methodology*, 10(1), 1-16.
- Marchand, A., Gender differences in the age-cohort distribution of psychological distress in Canadian adults: findings from a national longitudinal survey. *Boston Medical Center Psychology*, 2(1), 1-13.
- Matud, M. P., Gender differences in psychological distress in Spain. *International Journal* of Social Psychiatry, 61(6), 560-568.
- Ross, C. E. (1995). Reconceptualizing marital status as a continuum of social attachment. *Journal of Marriage and the Family*, 129-140.
- Dahlberg, L., McKee, K. J., &Lagergren, M. (2009). Coping with loneliness among widowed older people. *Journal of Aging Studies*, 23(4), 233-241.
- McGilton, K. S., Boscart, V. M., Close, J. C., &Mery, G. (2013). Understanding Falls:
 Identifying Contextual Factors in Seniors' Falls in Long-Term Care Facilities.
 Journal of the American Geriatrics Society, 61(7), 1155-1158.
- Lai, D. W. L., Chappell, N. L., & Arthur, D. (2011). The Gendered Experience in Assisted Living: Resident Perspectives. *Journal of Aging Studies*, 25(2), 180-190.

- Kuske, B., Hanns, S., Luck, T., Angermeyer, M. C., Behrens, J., & Riedel-Heller, S. G. (2016). Nursing Home Staffing and Staff Mix in Relation to Mental Health and Secure Psychotropic Drug Use in Nursing Homes in Germany—Results of a Cross-Sectional Study. *Journal of the American Medical Directors Association*, 17(2), 121-126.
- Coyle, C. E., & Dugan, E. (2012). Social isolation, loneliness and health among older adults. *Journal of Aging and Health*, 24(8), 1346-1363.
- Umberson, D., Williams, K., Powers, D. A., Liu, H., & Needham, B. (2006). You make me sick: Marital quality and health over the life course. *Journal of Health and Social Behavior*, 47(1), 1-16.
- Bookwala, J. (2009). The role of marital quality in physical health during the mature years. *Journal of Aging and Health*, 21(7), 1065-1088.
- Li, Y., & Ferraro, K. F. (2006). Economic hardship and depression among older adults: The role of marital satisfaction. *Journal of Marriage and Family*, 68(1), 41-53.
- Carr, D., House, J. S., Wortman, C., Nesse, R., & Kessler, R. C. (2000). Psychological adjustment to sudden and anticipated spousal loss among older widowed persons. *Journal of Gerontology: Psychological Sciences*, 55B(4), P207-P216.

Appendices

Appendix A

It comprises the permission letter from the original author of the Multidimensional Perceived Social Support Scale (MSPSS), also got the copy of the translated version of the scale in Urdu.

Zimet, Gregory D <gzimet@iu.edu>28 Nov 2022, 19:29 To: Rimsha Mahmood <u>rimshamehmood18@gmail.com</u>

Hello,

You have my permission to use the Multidimensional Scale of Perceived Social Support (MSPSS) in your research. I have attached several documents: 1. A copy of the original English version of the scale, with scoring information on the 2nd page; 2. A document listing several articles that have reported on the reliability and validity of the MSPSS (references #19, #24, and #29 all report on Urdu versions of the scale); 3. A chapter on the MSPSS; and 4. Copies of two Urdu translations and an article on the Tonsing translation (you have my permission to use either of these translations).

I hope your research goes well.

Best regards,

Greg Zimet

From: Zimet, Gregory D <gzimet@iu.edu>
To: Rimsha Mahmood <rimshamehmood18@gmail.com>
Date: 28 Nov 2022, 19:29

The permission letter from the original author of the DASS-21 also got the copy of the translated version of the scale in Urdu.

Naeem Aslam psy_naeem@yahoo.com>

Wed, 7 Dec 2022, 07:48

To: Rimsha Mahmood rimshamehmood18@gmail.com

Rimsha Mahmood You can use Urdu DASS 21 in your research. Good luck

From: Naeem Aslam <psy_naeem@yahoo.com>
To: Rimsha Mahmood <rimshamehmood18@gmail.com>
Date: 7 Dec 2022, 07:48
Subject: Re: Permission required for the usage of DASS-21 Scale

Appendix B

Support letter for data collection



Capital University of Science and Technology Islamabad Islamabad Expressway, Kahuta Road, Zone V, Islamabad, Pakistan Telephone +92-(51)-111-555-666 +92-(51)-4486700 Fax +92-(51)-4486705 Email (reforeast edu.ok Website: www.c.st.edu.ok

Ref. CUST/IBD/PSY/Thesis-356 February 10, 2023

TO WHOM IT MAY CONCERN

Capital University of Science and Technology (CUST) is a federally chartered university. The university is authorized by the Federal Government to award degrees at Bachelor's. Master's and Doctorate level for a wide variety of programs.

Ms. Rimsha Mahmood, registration number BSP193041 is a bona fide student in BS Psychology program at this University from Fall 2019 till date. In partial fulfillment of the degree, she is conducting research on "Relationship between perceived social support and psychological distress among geriatric population". In this continuation, the student is required to collect data from your institute.

Considering the forgoing, kindly allow the student to collect the requisite data from your institute. Your cooperation in this regard will be highly appreciated.

Please feel free to contact undersigned, if you have any query in this regard.

Best Wishes,

Dr. Śabahat Haqqani Head, Department of Psychology Ph No. 111-555-666 Ext: 178 sabahat,haqqani@cust.edu.pk

Appendix C

رضامندي فارم

میں رمشا محمود کیپٹل یونیورسٹی آف سائنس اینڈ ٹیکنالوجی میں ہی ایس سائیکولوجی کی طالبہ ہوں۔ میں آپ کو اپنی تحقیق میں حصہ لینے کی دعوت دیتی ہوں۔ میری تحقیق کا عنوان ہے "میینہ سماجی حمایت اور نفسیاتی پریشائی کے درمیان تعلق. "

اس تحقیق میں حصہ لینے کے لئے؛ آپ کو دینے گئے سوالنامے پر کرنے ہوں گے. آپ کی شناخت کو خفیہ رکھا جائے گا اور آپ کی شرکت رضاکار انہ طور پر ہے۔ اگر آپ اس مطالعہ میں اپنی شرکت کو ختم کرنا چاہتے ہیں تو آپ بغیر کسی سوال کے ایسا کر سکتے ہیں۔ آپ کو کسی بھی موقع پر تحقیق سے دستبردار ہونے کا حق ہے۔ آپ کے ڈیٹا کو خلیہ رکھا جائے گا اور صرف تحقیق کے مقصد کے لئے استعمال کیا جانے گا.

ہراہ کرم رابطہ کریں اگر آپ کو مطالعہ کے بارے میں سوالات ہیں،

ای میل: rimshamehmood18@gmail.com

دستخط

رمشامعمود

شكريہ

Appendix D

ڈیموگر افک سوالنامہ

میں آپ سے <mark>آ</mark>پ اور آپ کے خاندان کے بارے میں کچھ معلومات طلب کرکے شروع کرنا چاہتی ہوں۔ براہ مہربانی ہر سوال کا جواب جندا ممکن ہو درست طریقے سے دیں۔

آبادیاتی مطومات: ۔

عبر:

قوميت:

جنس: ۱) مرد 2) عورت

ازدواجي حيثيت:

کام کی حیثیت 1) ملازمت 2) غیر ملازمت 3) ریڈائرڈ

ربئے کی حیثیت: 1) خاندان کے ساتھ رہنا 2) کیئر ہوم میں رہنا

Appendix E

Multidimensional Perceived Social Support Scale

دیئے گئے	بیان کے آگے	متفق ہیں۔ ہر	مثفق يا غير	ں حد تک	، آپ ان سے ک	ں اور بتائیں ک انشان لگائیں۔	ہدایات: مندرجہ ذیل بیانات کی غور سے پڑ ہے جرابات میں سے کسی ایک پر (√) ک
ىپت زىيادە مىلقاق	زيادہ مقق	معمولی سا مثلق	درمواقہ	معمولی ما خورملاق	زيانه غىرملۇق	بېت زياده غور منځې	
							 ایک خاص شخص ہے جو ضرورت کے وقت میرے ارد گرد موجود ہے۔
							 ایک خاص شخص ہے جس کے ساتھ میں اپنی خوشیاں اور غربانٹ سکتا/سکتی ہوں۔
							 میر اخاندان واقعی میر ی مند کرنے کی کوشش کرتا ہے۔
							 میں جذباتی مدد اور حمایت ضرورت کے وقت اپنے خاندان سے حاصل کرتا/کرتی
							برن۔ 5. ایک خاص شخص ہے جر درحقیقت میرے لئے سگرن کا ذریعہ ہے۔
							 میرے دوست واقعی میری مدد کرنے کی کرشش کرتے ہیں۔
							 میں اپنے دوستوں پر انحصار کر سکتا سکتی ہوں جب چیزیں غلط ہوں۔
							 میں آپنے مسائل کے متعلق اپنے خاندان سے بات کر سکتا/سکتی ہوں۔
							 میرے دوست ہیں جن کے ساتھ میں اپنی خوشیاں اور غم بانٹ سکتا/سکتی ہوں۔
							10۔ میری زندگی میں ایک خاص شخص ہے جو میرے احساسات کا خیال رکھتا ہے۔
							 ابر اخاندان فیصلہ کرتے میں میری مدد کے لئے رضا مند ہے۔
							12۔ میں اپنے مسائل کے متعلق اپنے دوستوں سے بات کر سکتا/سکتی ہوں۔

Depression Anxiety Stress Scale

<u>بر</u> چر	<u>با</u> تات	میں قیص	بمحى بمحد	الإدارات	بردت
_1	میرے لیے پڑ سکون ہونا مشکل ہو جاتار ہاہے	0	1	2	3
_2	یچھے بیا احساس ہو تاریا ہے جیسے میر امنہ خشک ہوریا ہے				
_3	یچھے تکی قشم کے مثبت جذبات محسوس نہیں ہوئے				
_4	یجھے سانس لیتے میں دشواری محسوس ہوتی رہی ہے (بغیر کسی جسمانی مشتق دالے کام کے)				
_5	بچے کمی کام کے کرنے کیلیے آغاز کرنا مشکل محسوس ہو تارہا ہے				
_6	میں نے یعض حالات میں غیر ضروری رو عمل کا اظہار کیا				
_7	یجھے کیکیابٹ محسوس ہوتی رہی ہے (شلقا ہاتھوں میں)				
-8	یں نے محسوس کیا کہ میں بہت ڈیادہ ڈینی توانا کی استعال کر رہا ہوں				
-9	میں ایسے حالات سے تحجر اتى / تحجر اتار پاجن میں میرے احق بنے اود میرى ب تو تى بڑ سے				
	كاخدشه تحاد بوتاب				
-10	یں اپنا مستقبل تاریک محسوس کرتی /کر تارہا				
-11	يحص اين الماين محسوس ومتاريا				
-12	میں ذہبنی طور پر بے سکونی محسو س کرتی / کر تاہوں				_
-13	unter Star and a				
-14	میرے لیے آپ چیزیا تحض کو پر داشت کر نامشکل رہاہے جو میرے کام میں رکاد یہ چید اس				
-15	يجي محسوس بوتاريات بي في الدويز في لكاني				
	محجبه کسی بھی کام میں دلچیہی تعبین رہی				
-17	بجحه محسوس بوجارما که یش کسی قابل فیس بول				
	UNIT TO A COMPANY	-			
-18	بچھے محسوس ہو تاریا کہ میں کی قام میں یہ کی ہو۔ بچھے بلاد جہ بغیر کسی جسمانی مشلاح کے دل کی د حور کن تیز محسوس ہوتی رہی				
~19	میں بغیر کسی دجہ کے شوفز دہ ہو جاتی / جاتار ہا میں بغیر کسی دجہ کے شوفز دہ ہو جاتی / جاتار ہا				
-20	میں بھر کادید کے فرار معام ہے۔ بچھے یہ احساس ہو تاریا کہ زند گاہے ستنی ہے				

ORIGIN	ALITY REPORT					
	4% ARITY INDEX	9% INTERNET SOURCES	7% PUBLICATIONS	7% STUDENT PAPERS		
PRIMAR	IV SOURCES					
1	Submitt Pakistar Student Pape		ucation Comm	hission		
2	scholars	repository.llu.e	du	1		
3	www.tar	ndfonline.com		1		
4	cronfa.s	wan.ac.uk		1		
5	scholarworks.wmich.edu					
6	Submitt Student Pape	ed to University	of Essex	<1		
7	Submitt Student Pape	ed to Bond Univ	versity	<1		
8	P. Van D mental l	Llullaku, Rita Se Der Helm. "Koso health crisis", Jo Health, 2023	vo sexual min	orities: A		