

## Predictors of Psychological Distress among Old Aged

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### Abstract

Psychological distress is linked with the lack of social support and loneliness. The Elderly is suffering from many psychological issues and a lack of social support. Often, in old age homes, the lack of immediate friends and family leads them to many issues like loneliness, which affects their mental health. So it is essential to address this issue to provide care and support them. This study aimed to understand the contributing factors of psychological distress and influencing factors of psychological distress, loneliness, religiosity, and social support. The study was conducted on 159 older people (age range 60-90 years) of Thrissur and its neighboring places by employing a convenient sampling technique. The psychological distress scale was used to measure psychological distress. The UCLA Loneliness Scale, Perceived Social Support Scale, and Religiosity Scale were used to measure loneliness, perceived social support, and religiosity, respectively. Personal details of the participants, such as age, sex, socio-economic status, marital status, etc., were collected using a personal data sheet. Results revealed that the loneliness and support from the family were highly contributing to predictors of psychological distress, and loneliness and support from friends contributed to depression. Males and females differ on psychological distress and its components, namely anxiety and depression. Moreover, males and females experienced similar religiosity and stress levels, and females experienced higher levels of loneliness than males. As a result of lower support from family, friends, and special person and overall perceived social support, there occurs a higher level of depression. Psychological distress will be high when there is lower social support from family, friends, and special people. Also, when there is greater psychological distress, there will be high loneliness. Older persons will have high religiosity when there is high loneliness. Stress and depression differ between people living in old age homes and Pakal Veedu. Reduction in loneliness occurs when there is a presence of a special person in their life.

**Keywords:** psychological distress, loneliness, social support, religiosity, old age

### Introduction

Aging is an individual process that occurs at different rates in different people. Many factors affect the aging process, such as psychosocial factors that may speed up or reduce the rates of physiological changes. It is said that the status and roles of older persons, their different cultural patterns, social organization, and collective behavior are affected by social change. Aging is a physiological phenomenon, and complex progressive changes in an organism accompany it. Old age is usually explained as it starts from age 60. Old age can be subdivided into early old age, it extends from age sixty to age seventy, and advanced old age begins at seventy and extends to the end of life (Hurlock, 1981). Aging is a natural process, and it is any change in an organism over time (Kaur, 2011).

Maheswari (2010) suggests that in India, the reduction in fertility level is reinforced by an increase in life expectancy, which has produced fundamental changes in the population's age structure, leading to the Aging population. There were 56.7 million Indian older people in 1991, and 72 million in 2001. Also, today India is home to one out of every ten senior citizens of the world. In addition, both the absolute and relative size of the population of the elderly in India will gain strength in the future (Maheswari, 2010).

Aging theory, Cumming and Harry (as cited in George, 2009) proposed disengagement theory. This theory suggests that old age is the period in which there occurs a withdrawal of individuals from their society and their social interactions become reduced. Moreover, this type of reduced social contact and interaction is a part of preparing old-aged persons to phase their later phases of life. Theorists suggest that disengagement of the elderly is necessary for successful aging.

Inactivity theory, Havighurst (as cited in Maheswari, 2010) suggests that the elderly prefer to remain productive and active as individuals become old. They lose their status, roles, etc. To be happy elderly are possible by retaining their statuses and roles, such as replacing the status from a worker to a volunteer. Older persons want to maintain their statuses. Every status has a role to it; in the elderly, they have this role changes too. This is known as role theory. Streib and Schneider (as cited in Maheswari, 2010) suggests that the elderly have to deal with four role changes: loss of work role, loss of income, retirement, and reduced role as a parent poor physical health. They can find broad roles with private and community organizations to achieve their goals.

Continuity theory suggests that there is no need for the elderly to disengage or become active to deal with old age. According to

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individuals' past and preferred lifestyles, they decide which roles should be disregarded and maintained. Those who prefer to be active will do so, and those who desire lower levels of interaction may do so. Besides these, there are theories like symbolic interactions, labelling theory, and exchange theories in which more positive attitudes view aging (George, 2009).

### Psychological Distress

Psychological distress is defined differently by different researchers. Psychological distress is a condition that involves individuals experiencing anxiety, depression and stress. Moreover, a state where the individual lacks mental health issues leads to psychological problems. Psychological distress is a serious issue of people in all most all cultures. In addition, due to drastic changes and demands from the environment, individuals cannot cope with these psychological states (Saheera & Manikandan, 2015). The elderly are vulnerable to psychological distress when losing friend support and to lose friend support when experiencing psychological distress (Matt & Dean, 1993). The study conducted by Patil and Itagi (2013) revealed that institutionalized citizens show more psychological distress than non-institutionalized senior citizens. Both institutionalized and non-institutionalized senior citizens experienced distress due to demographic variables such as age, gender, education, and family size (Patil & Itagi 2013; Patil & Itagi, 2014). According to Ridner (2004), psychological distress is a "unique discomforting emotional state experienced by an individual in response to a specific stressor or demand that results in harm, either temporary or permanent, to the person."

There are many models explaining psychological distress. Different models explain psychological distress differently, as the medical model explains it as the condition, which is the lack of mental health that leads to many problems. Whereas the interpersonal theories explain psychological distress as the maladaptive behavior observed in relationships, and the dysfunctional relationships of the individual mainly cause it. Nevertheless, other theories like psychodynamic theory focus on the cause of psychological distress as childhood experiences, whereas cognitive theorists explain it as negatively biased cognition (Mabitsela, 2003).

In addition, many fixed risk factors which have been shown to affect psychological distress in later life are age, gender, and educational status. In addition, several potentially modifiable risk factors have also been identified, for example, mental health, activity levels, social support, sleep, functional status, physical health burden, and alcohol consumption (Atkins et al., 2013).

Psychological distress is an essential factor, especially in people of old age (Adams et al., 2004; Jabin, 2016). There are many important factors related to psychological distress. Also, have a significant impact on psychological distress, which many authors raise on loneliness research (e.g., Paul et al., 2006; Vijayshri, 2013), religiosity (Medvene et al., 2016), and perceived social support (Couture et al., 2005; Matt & Dean, 1993).

Loneliness is a subjective, negative feeling related to the person's own experience of deficient social relations (Jabin, 2016). Loneliness has been defined in the social psychological literature as consisting of emotional isolation, which results from the loss or lack of a truly intimate tie and social isolation, the consequence of lacking a network of involvements with peers of some sort (Weiss, 1973).

In addition, some studies mention the consequences of loneliness on psychological distress. Jabin (2016) attempted to study the relationship between loneliness and depression among old-aged people. Loneliness plays an important role in determining depression among old-aged people. Depression levels can be reduced by reducing loneliness among old-aged people. Pettigrew and Roberts (2008) conducted a study to determine whether the increasing social isolation experience in old age results in feelings of emotional isolation and thus of loneliness. Furthermore, they concluded that the specific behaviors leading to ameliorating loneliness include friends and family considered an emotional resource, engaging in eating and drinking rituals to maintain social contacts. Moreover, spending time constructively by reading and gardening. In addition, specific recommendations are provided for interventions designed to prevent and treat loneliness among older people.

Findings of a study by Chokkanathan (2013) suggest the crucial role of religiosity in influencing the wellbeing of older adults. A need to integrate religiosity in interventions for older Indian adults is discussed. Maheshwari (2010), researched older adults in India, indicating that religiosity increases life satisfaction and reduces psychological distress. Religiosity as the extent to which an individual feels that religious beliefs influence his or her life Pittman (as cited in Kaur, 2014). WHO defined human religiosity as that which is in total harmony with perceptual and non-perceptual environment WHO (as cited in Kaur, 2014). There is a contribution of religious involvement and religious attitudes in predicting mental health in adulthood (Dezutter et al., 2006).

Perceived social support has been described as both a buffer against life stressors as well as an agent promoting health and wellness in all cultures (Dollete et al., 2004). The study conducted by Lyyra and Heikkinen (2006) found a strong association between non-assistance-related perceived social support (consisting of feelings of worth, emotional closeness, belonging, and an opportunity for nurturance) and survival in older women.

Perceived social support reflects an individual's feeling that he/she is accepted, loved, and valued by other members of their social network. Furthermore, social support is an essential factor that plays a major role in maintaining wellbeing in old-aged people. Social support is a moderator of stressful life events. Lack of social support leads to both physical and mental health problems. The social relations related to an active environment are significant determinants of subjective wellbeing, including perceived satisfaction in life in older adults (Patil & Itagi, 2014).

The Healthcare system has improved a lot; thus, the longevity has also improved, resulting in many aged people in India. They are the ones who have contributed to society immensely. It is the society's or government's responsibility to care for and support them. Kerala has achieved high medical competency, and the level of success in addressing physiological health issues or medical problems is high. However, the issue is the lack of addressed psychological problems among old age. Psychological issues in old age may be due to factors like the migration of their children or loved ones, loneliness, and lack of social support. Medical issues can be addressed easily due to the advanced health care system. So it is important is to address the issues of old age and develop a framework for caring for psychological issues of old age. Promote action policies and encourage research and information exchange.

The older population faces several problems and adjusts to them in varying degrees. These problems range from the absence of ensured and sufficient income to support themselves and their dependents during ill health, the absence of social security, the loss of social role and recognition, the unavailability of opportunities for creative use of their free time. The needs and problems of the elderly differ according to their age, socio-economic status, health, living status, and other such background characteristics. As people live longer and into much-advanced age (say 75 years and over), they need more intensive and long-term care that may lead to increased financial stress in the family. Economic problems occupy an essential position among the several problems of the elderly in society. The Elderly suffers from many psychological issues and a lack of social support. Often, in old age homes, the lack of immediate friends and family leads them to many issues like loneliness, which affects their mental health. So it is crucial to address this issue in order to provide care and give support for them.

### Objectives

1. To know the extent of social support, loneliness and psychological distress among old aged people.
2. To find out the relationship of social support, loneliness, psychological distress and religiosity among old aged people.
3. To find out the contributors of psychological distress of the old aged people.
4. To find out the role, type of living and sex on social support, loneliness, psychological distress and religiosity among old aged.

### Hypotheses

1. There will be significant low social support, high loneliness, high psychological distress and high religiosity among old aged people.

2. There will be significant relationship exists among the variables under study.
3. The study variables significantly contribute to the development of psychological distress among old-aged people.
4. There will be significant differences between males and females on social support, loneliness, psychological distress and religiosity among old aged.
5. There will be significant differences between people who live in old age homes and who live in Pakal Veedu on social support, loneliness, psychological distress and religiosity among old aged.

### Methodology

#### Participants

Participants of the study consist 159 elders selected through convenient sampling. They live in both institutionalized conditions and "Pakal Veedu" (non-institutionalized conditions) in Thrissur district of Kerala. The sample consists of 77 institutionalized elders and 82 non-institutionalized elders (Pakal Veedu). With regard to religion, 126 (79.2 %) were from Hindu and 7 (4.4%) from Islam and 26 (16.4%) were from the Christian religion. Socio-economic statuses of the participants were collected and 139 (87.4%) participants were from lower socio-economic status, 19 (11.9%) from middle socio-economic status and 1(0.6%) from higher socio-economic status. Among the total participants, 159 (100%) participants were believers of God. There were 112 (70.4 %) female participants and 47 (29.6%) male participants. Among them, 29 (18.2 %) participants, husband or wife, were alive. And for 107 (67.3%) participants, husband or wife was not alive and among them, 22 were single (13.8%) and 1(0.6 %) participant was divorced. Regarding the number of children, there were 61 (38.4%) of participants with no children, 20 (12.6%) having 1 child, 28 (17.6%) with 3 children and the remaining had more than 3 children.

#### Instruments

**Psychological distress scale (R).** Psychological distress scale (Revised) was developed by Manikandan (2015) to measure depression, anxiety, and stress in young adults. The psychological distress scale consists of 18 items, and of these 4 belong to stress (1 to 4), 7 items (5 to 11) belong to anxiety and the last 7 items (12 to 18) belong to depression. Reliability of the psychological distress was established through Cronbach Alpha and it was found to be 0.87 for the whole scale. The authors also reported face validity for the psychological distress scale.

**UCLA loneliness scale (V3).** UCLA loneliness scale was developed by Russell (1996) to measure one subjective feeling of loneliness and feelings of social isolation. The UCLA loneliness scale consists of 20 items. Participants rate each item on a scale from 1(never) to 4(often). Furthermore, this measure is a revised version of both the original UCLA Loneliness Scale and the revised UCLA Loneliness Scale. Reliability of the UCLA loneliness scale was established through Cronbach alpha and it was found to be 0.96 for the whole scale and a test-retest correlation over a two-month period of .73. Concurrent and preliminary construct validity are indicated by correlations with self-reports of current loneliness and related emotional states and by volunteering for a "Loneliness clinic."

**Perceived social support scale.** Perceived social support scale was developed by Manikandan (2015) to measure perceived social support from friends, family and special people. Perceived social support scale consists of 22 items: of these 9 items (1,5,7,9,10,12,15,18,21) belongs to family, 8 items (2,4,6,11,14,17,20,22) items ( 5 to 11) belongs to friends and 4 items (3,13,16,19 ) belongs to special person. Item no.8 is kept as a filler item on the scale. The reliability of each dimension was established by calculating Cronbach Alpha and it was found to be acceptable. Reliability for the family is .89, friends equal to .87 and for significant others .79. Reliability for the whole scale was also reported as .89. The validity of perceived social support was established by giving the scales to experts in the field of psychology

and measurement like professors, associate professors, counselors, practitioners and trainers. As per their report, the items in the perceived social support scale measure what it intends to measure. Hence the authors claim that the perceived social support scale has faced validity.

**Religiosity scale.** The religiosity scale was developed by Manikandan and Shamsiya (2016). This is a 35 item instrument based on the concepts of religious and spiritual functioning of the individual. The reliability of the scale was established by calculating the Cronbach Alpha and it was found to be 0.97. The authors also reported face validity.

**Personal datasheet.** Personal details of the participants such as age, sex, socio-economic status, marital status etc. were collected using a personal data sheet.

#### Procedure

The investigator directly met the head of the institution and discussed the purpose, objectives and importance of the study. After receiving the permission, the investigator contacted each individual personally. Moreover, they explained the purpose, objectives and relevance of the study and solicited their whole-hearted cooperation for the study. Also, the investigator established a rapport with the elders and assured the participants that the responses should be kept confidential and only used for educational purposes. After getting the consent from each participant, the investigator introduced the Psychological distress scale, UCLA Loneliness Scale Version 3, Perceived social support and religiosity scale to them individually and requested to complete as per the direction printed on the instruments themselves. Even then, the investigator gave oral instructions to the participants so that the responses would be better—the style of responding varied from one scale to the other. After completion of the instruments, it was collected back and checked for the omission. Then the instruments were scored/coded as per the previously prepared scoring key and entered into a spreadsheet for further statistical analysis.

### Results and Discussion

In psychological research, researchers first may be interested in how individual characteristics is related to the psychological variables.

#### Influence of Demographic variables on Study variables

Demographic variables such as the biological sex of the participants, their age, socio-economic status and even the type of living may influence the individual behavior because human behavior is influenced by any type of demographic variables in relation to social variables. When anybody tries to understand or would like to intervene, the human behavior may have some idea about the demographic variables which influence the concerning behavior. Here the investigator tried to understand how the type of living of the old aged people was related to their certain psychological variables. In this study, social support, loneliness and psychological distress of the old aged who were living in old age homes and members of Pakal Veedu were compared and the results are presented in Table 1.

Table 1, it can be seen that there exist significant difference between people live in old age home and Pakal Veedu on social support ( $t = 8.63, p < .01$ ), and its dimensions namely family ( $t = 9.14, p < .01$ ), friends ( $t = 5.24, p < .01$ ) and special person ( $t = 6.40, p < .01$ ). There was no significant difference observed in loneliness between these groups. Likewise, religiosity was also found to not differ significantly. But on the variable psychological distress and its dimensions, it was found that stress ( $t = 2.16, p < .05$ ) and depression ( $t = 2.88, p < .01$ ) significantly differ between people who lives in old-age home and Pakal Veedu.

One of the interesting observations was people living in Pakal Veedu scored higher mean scores in social support and its dimension than those living in old age homes. This implies that the psychological environment of the Pakal Veedu is very conducive for creating an environment in which people help each other and they perceive high

support from their family, friends and even from a special person. This type of living is very healthy for old aged people.

With regard to psychological distress, it was found that generally, people who live in old age homes experience more stress, more depression and higher psychological distress than the people who live in Pakal Veedu. This clearly indicates that an old-age home may not be providing a comfortable and psychologically healthy environment.

These results indicate that the Pakal Veedu respondents may have more friends, family, special person and social support. This might be because of the old age people in Pakal Veedu have to contact with their family as they are able to go to their own home daily. And have the opportunity to create more friends as they are free to go anywhere and the old age people in Pakal Veedu go for a tour and these all strengthen their friendship and they perceive as having more friends around them. And they share their problems in a common platform and there occurs a catharsis experience and these all result in perceived social support. However, in the case of old age people in old age home settings, they don't have the chance to go to their family and little chance to meet their family persons this might be lead to perceiving less family support. A study conducted in Kerala by George (2009) revealed that the aged persons residing in their own families perceive greater support from significant sources than those residing in old age homes.

It could be seen clearly from the results that old age home respondents take the first position in their overall experience of depression as their secured mean score was 13.66, respectively. The Pakal Veedu respondents lag behind the old age home respondents in their overall experience of depression as their secured mean score was 10.17. this result is in line with the earlier study conducted by Choi et al. (2008), which indicates that old age people living in nursing homes experience high levels of depression. The major causes of their depression were loss of independence, freedom and continuity with their past life, feelings of social isolation and loneliness. Furthermore, lack of privacy and frustration at the inconvenience of having a roommate and bathroom sharing, loss of autonomy due to the institutional regulations, ambivalence toward cognitively impaired residents, ever-present death and grief, staff turnover, staff shortage, and programming and lack of meaningful in-house activities. Self-reported coping mechanisms included religion, a sense of reality, a positive attitude and family support. Depression was predicted by

being older, the larger number of chronic health conditions, grieving a recent loss, fewer neighbor visitors, less participation in social activities and less church attendance (Adams et al., 2004). The results in Pakal Veedu might be because the supportive psychological environment provided by the Pakal Veedu than in the old age home. In old age homes, the old aged people are abandoned by their children and the other family members and this leads to a feeling of helplessness as well as hopelessness, so this might be a reason for more depression in old aged home respondents. But in the case of Pakal Veedu respondents, the system of Pakal Veedu itself reduces the financial as well as other types of burden in the family of old aged people. And they have contact with the family members. This might be a factor that reduces the depression in Pakal Veedu and family support might be a coping mechanism that plays a role in reducing depression. A recent study conducted in India reported that depression in old age people results from reduced perceived social support (Patil et al., 2014). Furthermore, social support such as a medium of social network and having health insurance are protective factors against depression (Pengpid & Peltzer, 2022). So, this might be a reason for the depression present in old age people.

The Pakal Veedu respondents lag behind the old age home respondents on their overall experience of loneliness, anxiety, psychological distress and religiosity as their secured mean score was lesser than the other group. The results indicate that even the old aged people are in Pakal Veedu as well as old age experience loneliness, psychological distress, stress as well as anxiety, the living conditions doesn't have any influence on these variables. Old age people in both living conditions might experience the same level of loneliness, anxiety and psychological distress. The previous research shows that grieving a recent loss, receiving fewer visits from friends, and having a less extensive social network these all predicted loneliness (Adams et al., 2004). In the case of religiosity, previous studies revealed that there was an increase in religiosity among old age people than those who stay in old age homes and who stay in their own homes. It's due to the institution giving more importance to the religious prayer participation here in both living conditions that is Pakal Veedu as well as old age home. Here, most old age homes, especially charity-based ones, are established and maintained by different religious groups. So, the inhabitants may naturally be indebted to them, which naturally increases their belief in religions' value (George, 2009).

**Table 1**

Mean, SD, and 't' Value of Family, Friends, Special Person, Social Support, Loneliness, Stress, Anxiety, Depression, Psychological Distress and Religiosity by Type of Living

Variables	Type of living	N	M	SD	t-value
Family	Old-age Home	77	15.83	8.110	9.14**
	Pakal Veedu	82	29.68	10.880	
Friends	Old-age Home	77	20.30	8.447	5.24**
	Pakal Veedu	82	27.79	9.564	
Special person	Old-age Home	77	8.55	4.406	6.40**
	Pakal Veedu	82	13.37	5.081	
Social support	Old-age Home	77	44.68	17.065	8.63**
	Pakal Veedu	82	70.84	21.066	
Loneliness	Old-age Home	77	55.13	9.437	1.054
	Pakal Veedu	82	53.66	8.065	
Stress	Old-age Home	77	7.01	3.255	2.16*
	Pakal Veedu	82	5.95	2.931	
Anxiety	Old-age Home	77	8.05	6.260	.330
	Pakal Veedu	82	8.37	5.682	
Depression	Old-age Home	77	13.66	8.649	2.88**
	Pakal Veedu	82	10.17	6.526	
Psychological distress	Old-age Home	77	28.73	14.692	1.955
	Pakal Veedu	82	24.49	12.484	
Religiosity	Old-age Home	77	83.51	16.161	.696
	Pakal Veedu	82	81.70	16.675	

Note. \* $p < .05$ , \*\* $p < .01$

Another variable that is usually interested by psychologists is the sex of the participants. In general or in totality, males and females are similar, but it has some relevance in many instances. In this context, the investigator tested if there were

any sex differences exist. The mean scores of males and females on social support, psychological distress, loneliness and religiosity were tested and the results are presented in Table 2.

**Table 2**

Mean, SD, and 't' Value of Family, Friends, Special Person, Social Support, Loneliness, Stress, Anxiety, Depression, Psychological Distress and Religiosity by Sex

Variables	Sex	N	M	SD	t-value
Family	Female	112	23.05	12.010	.131
	Male	47	22.79	11.604	
Friends	Female	112	25.75	10.224	3.71**
	Male	47	20.38	7.380	
Special person	Female	112	11.31	5.538	1.089
	Male	47	10.36	4.789	
Social support	Female	112	60.12	24.342	1.782
	Male	47	53.53	19.815	
Loneliness	Female	112	55.88	8.733	3.619**
	Male	47	50.79	7.802	
Stress	Female	112	6.61	3.189	.906
	Male	47	6.13	2.983	
Anxiety	Female	112	9.15	6.203	3.54**
	Male	47	5.98	4.646	
Depression	Female	112	12.71	8.204	2.35*
	Male	47	9.85	6.389	
Psychological distress	Female	112	28.46	14.361	3.11**
	Male	47	21.96	10.883	
Religiosity	Female	112	84.16	15.704	1.81
	Male	47	78.79	17.552	

Note. \* $p < .05$ . \*\* $p < .01$

From Table 2, it can be seen that there exist significant difference between males and females on psychological distress ( $t = 3.11, p < .01$ ) and its dimensions namely anxiety ( $t = 3.54, p < .01$ ) and depression ( $t = 2.35, p < .05$ ). There was no significant difference observed in stress between these groups. Likewise, religiosity was also found to not differ significantly. But on the variable loneliness ( $t = 3.619, p < .01$ ) there exist significant difference between these groups. But on the variable social support and its dimensions, it was observed that except for friends ( $t = 3.71, p < .01$ ), all other variables do not differ between these groups, namely family and special person.

One of the observations was that the female respondents scored a higher mean score in psychological distress and its dimensions such as anxiety, depression, and stress than males. This result was in line with the study conducted by Kaur in India as well as Paul et al. (2006), which explains as the percentage of psychologically distressed cases was higher in women (22%) than in men (18%) and they reported that psychological distress is impacted by sex. It implies that the more psychological distress in females could be because women still hold a disadvantageous position in the Indian cultural context. Moreover, women have more problems associated with complex social roles, powerlessness, and social isolation. They do not recourse to other social/recreational activities that men still engage in even at this age. This adds drudgery and boredom to their lifestyle, leading to higher levels of perceived stress. Moreover, their negative effect makes them more prone to stress (Kaur, 2011).

It could be seen clearly from the results that female respondents take the first position in their overall experience of friends and loneliness. Their mean score on the variables was 23.05 and 55.88, respectively. The male respondents lag behind the female respondents on their overall experience of friend's loneliness as their mean score was 20.38 and 50.79, respectively.

These results were in line with the research conducted by Paul et al. (2006), who explains that more females (8%) than males (5%) have reported feeling loneliness. The unadjusted odds ratios for loneliness showed that age, marital status, and most of the variables of the social network domain (living alone, friends, and having people to help when ill, to give a lift, and helping with finances and chores) are associated with loneliness. The meta-analysis conducted by Pinquart and Sorensen (2001) revealed that being a woman is a factor for experiencing increased loneliness. These results indicate that the females perceived as they have more friends than males. This might be because of their increased social network system than males. Loneliness might result from their loss of a partner, as most of the females might be widows, which might be the reason for their loneliness. The increased anxiety and psychological distress in females might be due to the result of their

feeling of hopelessness and helplessness due to lack of family support or special person, especially their partner and their increased loneliness might be a contributing factor for their depression.

Table 2 shows that there exists no significant difference between males and females on family, special person, social support, stress, and religiosity. It could be seen clearly from the results that females scored higher mean scores on family, special person, social support, stress, and religiosity. But male respondents scored less mean score on family, special person, social support, stress, and religiosity.

From the results, it can be seen that old age people experience high levels of psychological distress and loneliness. The lack of friendships as well as lack of family support and loneliness may be the contributing factors to psychological distress.

In this study, the investigator selected participants from old-age homes as well as Pakal Veedu. There exists a significant difference between males and females on friends, loneliness, anxiety, depression and psychological distress. And there exists a significant difference between Pakal Veedu and old age home on social support and its dimensions, namely family, friends, special person, and dimensions of psychological distress, namely depression and stress. So these variables under study are relevant and significant and they should be addressed when people are dealing with the old aged people.

To know how the variables under study, such as the variables family, friends, special person, social support, loneliness, stress, anxiety, depression, psychological distress and religiosity, were correlated or not, Pearson product-moment correlation was calculated and the results are given in Table 3.

From Table 3, it can be seen that all sub-variables of psychological distress such as stress, anxiety and depression are significantly and positively correlated with each other. This result indicates that an increase in any one of this behavior also increases the others too.

Results suggest that the variable stress shows significant negative correlation with family ( $r = -.22, p < .01$ ) as well as perceived social support ( $r = -.17, p < .05$ ). Thus it can be assumed that increased stress among elders results from lack of family support as well as lack of social support. Also, stress has an insignificant negative correlation with friends and special people. And the stress shows a significant positive correlation with loneliness ( $r = .28, p < .01$ ). Thus the result indicates that stress increases when loneliness increases. But stress has an insignificant negative correlation with friends and special people.

It can also be inferred from the Table 3 that anxiety has a significant negative correlation with family ( $r = -.16, p < .05$ ). Thus it can be assumed that anxiety increases when there exists a lack of family support. But anxiety in relation to social support and its sub-

variables such as special person and friends, there exists an insignificant negative correlation between them. And the anxiety shows a significant positive correlation with loneliness ( $r = .29, p < .01$ ) as well as stress ( $r = .40, p < .01$ ). So the result indicates that anxiety increases with increased loneliness as well as stress.

It can be seen that depression has a significant negative correlation with family ( $r = -.36, p < .01$ ), friends ( $r = -.38, p < .01$ ), special person ( $r = -.34, p < .01$ ) and perceived social support ( $r = -.42, p < .01$ ). Thus it can be assumed that depression increases with lack of social support as well as lack of friend support, family support and support of a special person. Depression has an insignificant positive correlation with loneliness. These results are in line with the study conducted by Roh et al. (2015), in which they indicated that social support are well-documented risk and protective factor for depression in older adults and social support was negatively associated with depressive symptoms. Patil et al. (2014) in Mumbai, India. A significant negative correlation was seen between perceived social support and depression, suggesting that with the increase in the level of depression, there is a decrease in the perception of the amount of social support. And also, results show that there was no significant correlation between depression and received social support. It states that the perception of social support in the elderly is affected by depression.

From Table 3 it can be inferred that Psychological distress has a significant negative correlation with social support ( $r = -.33, p < .01$ ) and its sub-variables namely family ( $r = -.32, p < .01$ ), friends ( $r = -.26, p < .01$ ) and special person ( $r = -.26, p < .01$ ). Thus it can be assumed that psychological distress increases with a lack of social support, family, friends and special people. These results are in line with the study conducted by Matt and Dean (1993), Couture et al. (2005), Gonyea and Bachman (2008), Thygesen et al. (2009), Falcón et al. (2009), as these studies indicates the relationship of social support to the psychological distress in old age and they explain the social support as an important risk factor for psychological distress. And psychological distress has a significant positive correlation with loneliness ( $r = .43, p < .01$ ). Thus it implies that psychological distress increases with an increase in loneliness. This result is in line with the studies conducted by earlier researchers such as Paul and Ayis (2006), Vijayshri (2013). The study's findings are as follows, loneliness, pessimism, and life satisfaction were significantly related to depression among old age participants loneliness and pessimism were positively related to

depression. In contrast, life satisfaction was negatively related to depression among old age participants. Moreover, the study of Park et al. (2017) implies a relation between living alone and depressive symptoms, and loneliness presents the risk factor for depressive symptoms. It has a significant positive correlation with stress ( $r = .60, p < .01$ ), anxiety ( $r = .83, p < .01$ ) and depression ( $r = .88, p < .01$ ).

It can be seen that religiosity has a significant positive correlation with loneliness ( $r = .79, p < .05$ ). Thus it can be assumed that religiosity increases with an increase in loneliness. This result is in line with Medvene et al. (2016), which states that participation in religious and community organizations is related to loneliness. There exist an insignificant positive correlation between social support and its sub variable, namely friends. But there exists an insignificant negative correlation between family and special person. Religiosity in relation to psychological distress there exists an insignificant positive correlation with psychological distress and its sub-variables.

Loneliness has a significant negative correlation with the special person ( $r = -.18, p < .05$ ). But there exists an insignificant negative correlation with family, friends and social support. The result indicates that loneliness increases with a lack of a special person. These results are in line with the study conducted by Medvene et al. (2016), which indicate that network types were associated with social isolation, relationship quality and loneliness. And the frequency of contact with children, friends, the family was an important factor related to loneliness. The study conducted by Ferreira-Alves et al. (2014) indicates the influence of marital status on loneliness. Often the loneliness results from a lack of a partner. As well as being widowed is an indicator of loneliness.

Perceived social support has a significant positive correlation with family ( $r = .90, p < .01$ ), special person ( $r = .83, p < .01$ ) and friends ( $r = .84, p < .01$ ). This indicates that any increase in any one of this behavior increases the others too. There is a significant positive correlation between friends and family ( $r = .53, p < .01$ ). As well as there exists a significant positive correlation of Special person with family ( $r = .72, p < .01$ ) and friends ( $r = .58, p < .01$ ). Thus it can be assumed that perceived social support increases with increased family, special person, and friends support. And friend's support increases with family support as well. And the perception of a special person's support increases with an increase in family support and support of friends.

**Table 3**  
Correlations of Variables under Study (N=159)

Variables	1	2	3	4	5	6	7	8	9	10
Family (1)	-									
Friends(2)	.53**	-								
Special person(3)	.72**	.58**	-							
Social support(4)	.90**	.83**	.84**	-						
Loneliness(5)	-.12	-.03	-.18*	-.12	-					
Stress(6)	-.22**	-.08	-.12	-.17*	.28**	-				
Anxiety(7)	-.16*	-.05	-.10	-.13	.29**	.40**	-			
Depression (8)	-.36**	-.38**	-.34**	-.42**	.42**	.35**	.54**	-		
Psychological distress(9)	-.32**	-.26**	-.26**	-.33**	.43**	.60**	.83**	.88**	-	
Religiosity(10)	-.06	.14	-.04	.02	.18*	.06	.019	.07	.06	-

Note. \* $p < .05$ . \*\* $p < .01$

To know the contribution of religiosity, special person, loneliness, friends, and family to psychological distress, regression analysis was performed with entering method and the results are presented in Table 4.

Table 4,  $R^2$  provides an indication of the explanatory power of the regression model on psychological distress. What constitutes a 'good'  $R^2$  differs depending on the setting and type of data used.  $R^2$  is simply the percentage of variance in the dependent variable (psychological distress) explained by the collection of independent variables (Religiosity, special person, loneliness, friends, family). In this case, the percentage of variance in psychological distress accounted for by religiosity, Special person, loneliness, friends and family variables were about 27.5%. That is, about 27.5% ( $R^2 = .275$ ) changes in psychological distress was accounted by religiosity, Special person, loneliness, friends and family variables.

**Table 4**  
Statistical Characteristics of Regression

Index	r	R <sup>2</sup>
Regression	.524	.275

**Table 5**  
Summary of the ANOVA

Source of variance	Sum of squares	df	Mean square	F
Regression	8164.616	5	1632.923	11.578**
Residual	21578.868	153	141.038	
Total	29743.484	158		

Note. \*\* $p < .01$

To test the linear relationship between the independent and dependent variable, regression ANOVA was done and the results showed that at 1% error level, there is a linear relationship between religiosity, Special person, loneliness, friends and family variables and psychological distress.

Table 6, it can be seen that loneliness and family were the significant predictors of psychological distress. That is among old-aged people, and psychological distress arises from lack of family support and loneliness. Actually, lack of family support leads to loneliness in old aged people. The reduced family support is often arisen due to the perception of old age people as burden of their family and this feeling often lead family members to send them old age homes or Pakal Veedu. And this often leads them to experience high loneliness and further it leads to depression. These results are in line with the earlier findings of Matt and Dean (1993); Paul and Ayis (2006); Dahlberg and McKee (2014). These studies indicated that the perceived social support especially support of family as well as friends and the loneliness are important predictors of psychological distress. Many earlier studies conducted in India had got the supporting results such as loneliness as the important predictor of psychological distress (Singh & Kiran, 2013).

**Table 6**  
Simultaneous Regression between Variables of Perceived Social Support and Loneliness, Religiosity and Psychological Distress

Variables	B	Beta	t-value
Family	-.272	-.235	-2.301*
Friends	-.225	-.160	-1.809
Special person	.182	.071	0.661
Loneliness	.641	.409	5.754**
Religiosity	-.003	-.003	-.043

Note. \*p < .05. \*\*p < .01.

Based on the results of regression analysis of the relationship between psychological distress and the family, the regression equation can be:

$$\text{Psychological distress} = 1.583 + -.272*(F) + .641*(L)$$

Where; PD = Psychological Distress, F = Family, and L = Loneliness

To know the contribution of religiosity, special person, loneliness, friends, and family to stress, regression analysis was performed with enter method and results presented in Table 7.

**Table 7**  
Statistical Characteristics of Regression

Index	r	R <sup>2</sup>
Regression	.347	.120

Table 7, R<sup>2</sup> an indication of the explanatory power of the regression model on stress. What constitutes a 'good' R<sup>2</sup> differs depending on the setting and type of data used. R<sup>2</sup> is simply the percentage of variance in the dependent variable (stress) explained by the collection of independent variables (religiosity, special person, loneliness, friends, family). In this case, the percentage of variance in stress accounted for by religiosity, special person, loneliness, friends and family variables was about 12%. That is, about 12 % (R<sup>2</sup> = .120) changes in stress is accounted by religiosity, special person, loneliness, friends and family.

**Table 8**  
Summary of ANOVA

Source of variance	Sum of squares	df	Mean square	F
Regression	185.776	5	37.155	4.181**
Residual	1359.783	153	8.887	
Total	1545.560	158		

Note. \*\*p < .01

To test the linear relationship between the independent and dependent variable, regression ANOVA was done and the results showed that at 1% error level, there is a linear relationship

between religiosity, special person, loneliness, friends and family variables and stress.

**Table 9**  
Simultaneous Regression between Family, Friends, Special Person, Loneliness, Religiosity and Stress

Variables	B	Beta	t-value
Family	-.072	-.273	-2.424**
Friends	.002	.006	.058
Special person	.070	.120	1.019
Loneliness	.097	.271	3.457**
Religiosity	-.001	-.006	-.071

Note. \*p < .05. \*\*p < .01

Table 9, it can be seen that loneliness and family were the significant predictors of stress. That is old aged people experience stress due to lack of family support and loneliness. Actually, lack of family support leads to loneliness in old-aged people. Family is another important predictor of stress among old age as the social networks especially contact with the family, children and family members, actually function as stressors. The physical problems among the old aged as well as their decreased functioning changed their role as a breadwinner of the family to a dependent person to the family and they are more withdrawn too. Especially the old aged people who live in institutional settings lack more family support than Pakal Veedu. When they perceive no one to care for, it leads to loneliness and further leads to stress.

Based on the results of regression analysis of the relationship between stress and the family, as well as loneliness, the stress can be predicted as follows:

$$S = 2.130 + (-.072)*(F) + .097*(L)$$

Where; S = Stress, F = Family, and L = Loneliness

So, it can say that for a unit change in psychological distress score, 2.130 can be added to the score of -.072 multiplied with friends, .097 multiplied with loneliness.

To know the contribution of religiosity, special person, loneliness, friends, and family to anxiety, regression analysis was performed with enter method and results presented in Table 9.

**Table 10**  
Statistical Characteristics of Regression

Index	R	R <sup>2</sup>
Regression	.322	.104

Table 10, R<sup>2</sup> provides an indication of the explanatory power of the regression model on anxiety. What constitutes a 'good' R<sup>2</sup> differs depending on the setting and type of data used. R<sup>2</sup> is simply the percentage of variance in the dependent variable (anxiety) explained by the collection of independent variables (Religiosity, special person, loneliness, friends, family). In this case, the percentage of variance in stress accounted for by religiosity, special person, loneliness, friends and family variables was about 10.4%. That is, about 10.4 % (R<sup>2</sup> = .104) changes in anxiety by religiosity, special person, loneliness, friends and family variables are predicted Table.

**Table 11**  
Summary of the ANOVA

Source of variance	Sum of squares	df	Mean square	F
Regression	580.004	5	116.001	3.538**
Residual	5016.726	153	32.789	
Total	5596.730	158		

Note. \*\*p < .01

To test the linear relationship between the independent and dependent variable, regression ANOVA was done and the results showed that at 1% error level, there is a linear relationship between religiosity, special person, loneliness, friends and family variables and anxiety.

**Table 12**

*Simultaneous Regression between Family, Friends, Special Person, Loneliness, Religiosity and Anxiety*

Variables	B	Beta	t-value
Family	-.093	-.186	-1.639**
Friends	.011	.019	.189
Special person	.080	.072	.604
Loneliness	.196	.288	3.640**
Religiosity	-.016	-.044	-.554

Note. \*\* $p < .01$

From Table 12, it can be seen that loneliness and family were significant predictors of anxiety. These results revealed that older adults' anxiety arises from lack of family support and loneliness. Actually, lack of family support leads to loneliness in old-aged people. Loneliness is a significant predictor of anxiety among old age. Marital status, widowhood, and the psychological environment that the elders live in contribute to loneliness and further lead to anxiety. Also, there will be anxious about their death, especially those that occur due to living alone. The psychological environment present in especially institutions lacks many factors such as privacy and freedom. These all might be a factor that contributes to loneliness, and these further predicts anxiety. In the case of family, lack of family support is also an important predictor of anxiety. Thus it can be assumed that family support can have the capacity to alleviate anxiety among elders. However, most of the elders will lack family support for those who live in institutions and Pakal Veedu. More focus should be given to further research on what factors would be capable of replacing family support. One reason for the lack of family support might be that the family members might perceive the elders as worthless and a financial burden.

Based on the results of regression analysis, the relationship between anxiety and the family, as well as loneliness, will be as follows

$$A = -.109 + -.093*(F) + .196*(L)$$

Where; A = Anxiety, F = Family, and L = Loneliness

To know the contribution of religiosity, special person, loneliness, friends, and family to depression, regression analysis was performed with enter method and results presented in Table 13.

**Table 13**

*Statistical Characteristics of Regression*

Index	<i>r</i>	<i>R</i> <sup>2</sup>
Regression	.577	.332

Table 13 provides *R*<sup>2</sup>, an indication of the explanatory power of the regression model on depression. What constitutes a 'good' *R*<sup>2</sup> differs depending on the setting and type of data used. *R*<sup>2</sup> is simply the percentage of variance in the dependent variable (depression) explained by the collection of independent variables (Religiosity, special person, loneliness, friends, family). In this case, the percentage of variance in depression accounted for by religiosity, special person, loneliness, friends and family variables was about 33.2%. That is, about 33.2% (*R*<sup>2</sup> = .332) changes in depression by religiosity, special person, loneliness, friends and Family variables are predicted Table.

**Table 14**

*Summary of the ANOVA*

Source of variance	Sum of squares	<i>df</i>	Mean square	<i>F</i>
Regression	3197.861	5	639.572	15.240**
Residual	6421.095	153	41.968	
Total	9618.956	158		

Note. \*\* $p < .01$

To test the linear relationship between the independent and dependent variable, regression ANOVA was done and the results showed that at 1% error level, there is a linear relationship

between religiosity, special person, and loneliness, friends and family variables and depression.

**Table 15**

*Simultaneous Regression between Family, Friends, Special Person, Loneliness, Religiosity and Depression*

Variables	B	Beta	t-value
Family	-.107	-.162	-1.654
Friends	-.239	-.299	-3.509**
Special person	.031	.021	.209
Loneliness	.349	.392	5.739**
Religiosity	.015	.031	.444

Note. \*\* $p < .01$

Table 15 it can be seen that lack of friends and loneliness were significant predictors of depression. That is, old-age people's depression arises from the lack of friend's support and loneliness. Actually, lack of friends support leads them to loneliness in old aged people. These results are in line with the study conducted by Djukanović et al. (2015) Park et al. (2017); both studies indicate that loneliness is an important predictor of depression. Adams et al. (2004) indicate that loneliness may contribute directly to depression and that the two constructs also share influence from factors such as grieving a recent loss and receiving (or not receiving) visitors. So it can be explained that loneliness is an independent risk factor for depression (Zebhauser et al., 2015). Loneliness in older adults is associated with having a smaller social network, with grieving a loss and receiving fewer visitors, especially friends, but that it appears unrelated to activity or church participation (Adams et al., 2004). Moreover, mental health gets worse and loneliness increases if individuals lose their partner (through divorce or death) or become unemployed (Van Ours, 2021). The loneliness, as well as lack of friends, support in institutionalized older adults, can be reduced by providing group-based programs designed to facilitate social support and improve cognitive abilities (Winningham & Pike, 2007). Based on the results of regression analysis, the relationship between depression and friends, as well as loneliness, will be as follows:

$$D = -.437 + -.239*(F) + .349*(L)$$

Where; D = Depression, F = Friends, and L = Loneliness.

## Conclusion

Among old age, it was found that there is reduced social support, a high level of loneliness, reduced psychological distress, and a high level of religiosity. Stress occurs as there is lower support from family. Those who have high stress and anxiety will be accompanied by higher loneliness. And family support is a factor that can reduce anxiety. As a result of lower support from family, friends, and special person and overall perceived social support, there occurs a higher level of depression. Psychological distress will be high when there is lower social support from family, friends and special people. Also, when there is greater psychological distress, there will be high loneliness. Older persons will have high religiosity when there is high loneliness. Reduction in loneliness occurs when there is a presence of a special person in their life. The loneliness and support from the family were highly contributing to predictors of psychological distress, and loneliness and support from friends contributed to depression. An important finding was that people living in pakal Veedu had high levels of social support from family, friends, and special people. But stress and depression differ between people who live in old age homes and Pakal Veedu. As elders live in old age homes is, having a high level of stress and depression than elders who live in pakal Veedu. Males and females differ on psychological distress and its components, namely anxiety and depression. And males and females experienced similar levels of religiosity as well as stress levels. Another important finding was female's experiences high levels of loneliness than males.

Conducting studies on psychological distress among old aged people is one way of conveying those problems of the elderly must be considered and treated. Mental health professionals may try to educate the old aged people on how to deal with the psychological distress. Mental health professionals in association with social

workers may focus on social work training and interventions with individuals, families, and communities. Proper methodological, psychological intervention must be devised to help the practitioners or counselors deal with the factors that contribute to psychological distress. Furthermore, the findings of the study will be beneficial for psychologists working in the area of gerontology. Further improvements in the functioning of Pakal Veedu and old age home, such as strengthening friendships and giving online facilities to improve the friendship circle in the virtual world by authorities or government, can be taken into consideration. The researcher can plan interventions to reduce loneliness among them by giving group activities.

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