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## OLDER PEOPLE, LONELINESS AND DEPRESSION

# FEELING OF LONELINESS AND DEPRESSION AMONG OLDER ADULTS WITH HIGHER EDUCATIONAL ACHIEVEMENTS

**Abstract: Background:** Social engagement is an indicator of successful ageing. Prior research showed that loneliness and depression have unpleasant effects on older adults.

**Aim:** In spite of broad evidence of the higher education level benefits for health problems, still know quite little about its relation with psychological status. The proposed exploratory study aimed to explore the level of loneliness and depression among retired teachers with higher educational achievements and investigate the relationships which exist between demographic characteristics with loneliness and depression in this aged group of the population.

**Material & Methods:** Study was conducted among 402 retired teachers. Data was collected through the use of a questionnaire that consisted of three sections, including demographic questions and 15 questions relating to the social and emotional loneliness scale and geriatric depression scale. Scores 2 or greater on the five-item geriatric depression scale were used to diagnose the presence of depressive symptoms.

**Results:** In general, 18.6% of the respondents reported loneliness in which social loneliness was more prevalent (29.4%). Prevalence of depression among participants was 39.9%. Findings showed that there

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were differences in the level of loneliness and depression between those with diverse demographic characteristics.

**Conclusion:** As results showed compare with other studies the level of feeling loneliness and depression among retired teachers was lower than other older populations. Therefore, increasing human capital and encourage people for ownership of post-basic education can have a protective effect on these problems.

**Key Words:** Older people, Social loneliness, Family loneliness, Romantic loneliness, depression.

#### Introduction

Older adults' well-being in general, and their loneliness in particular, are important considerations for scholars. The social engagement and participation of older adults in society are seen as indicators of successful ageing <sup>(1)</sup>. Following social changes over recent years, many older people are at risk of social isolation <sup>(2)</sup>. Older people often live alone, live longer lives, and suffer from loneliness <sup>(3,4)</sup>. Indeed, recent research has demonstrated that a considerable portion of the older population experience social isolation, as measured by low levels of social participation, inadequate social activity, and feelings of boredom, loneliness and unhappiness <sup>[5]</sup>.

Loneliness has been defined as a psychological situation that develops from perceived discrepancy between the number and quality of relationships one wishes to have and the number and quality of relationships one actually has <sup>(4)</sup>. The alternative conceptualisation of loneliness which views this experience as a multidimensional phenomenon is Weiss's (1973) perspective of loneliness <sup>(6,7)</sup>. Weiss identifies two types of loneliness: social loneliness and emotional loneliness. Social loneliness is the feeling of boredom due to the lack of meaningful friendships, or a sense of belonging to a community. Emotional loneliness is a feeling of emptiness and restlessness due to the lack of intimate relationships <sup>(6)</sup>. It has been reported that a person might suffer from loneliness even when he or she is surrounded by others <sup>(8)</sup>. Indeed, satisfaction from contacts is more important than the frequency of relationship with children and friends <sup>(9)</sup>. Therefore, loneliness is experienced when significant social interactions are lost <sup>(10)</sup>.

A range of factors may put older people at increased risk of social isolation and feelings of loneliness. They may lose important components of their social environment through retirement from the paid workforce, or geographic relocation of their significant others, and they may lose relatives through illness (8). Changing needs of members of the extended family may reduce social contacts, and contemporaries may be lost through poor health or death (11). In the case of

widows and widowers, there may be a lack of a companion with whom to engage in social activities. Further, there may be a lack of availability or accessibility to desired activities. A number of personal factors may interrupt the ability of older people to engage in social activity [12]. For example, poor health, lack of mobility, financial constraints, adverse side effects of medications, difficulties with transport, caring for a significant other, fear for personal safety, and needing assistance may all contribute to reduced social activity, and eventually social isolation (2,12). It has been estimated that at any time, one in four people suffers from loneliness (3,7).

Evidence shows that loneliness has an adverse effect on older adults. People who receive less emotional and social support due to feelings of loneliness are more likely to experience a reduced sense of well-being (13), especially social well-being manifested by feelings of emptiness, abandonment and forlornness (14). Elderly people living alone are more likely to be depressed (15), receive less emotional and instrumental support (16), suffer from cognitive decline (17), report frequent physician visits and a lower quality of life and well-being than elderly people living with others (14,16,18,19,20). Moreover, it has been reported that people with higher scores for feeling loneliness are four times more likely to experience elder abuse (14). A feeling of loneliness can also result in a significant contribution to suicidal actions among older adults (121,22). Therefore, perceived loneliness can arbitrate perceived physical health and loneliness can be associated with mortality and with patho-physiological and psychological morbidity particularly depression (23); and conversely social interaction, especially with family and community networks is strongly associated with positive mental health outcomes (24). Depression similar to loneliness is a major health problem in the elderly population. The prevalence of depression differs depending on the settings and countries. Depression is associated with problems such as a higher prevalence of disability (25,26,27), worse outcome of several diseases (28) and increased use of medical services. (29). There is a discrepancy in the frequency of loneliness and depression among Iranian elderly people in different places, with records indicating that the prevalent of loneliness ranges from 39.4% to 47.7% (30) and depression from 46% to 55.7% (31,32).

Previous research showed that educational achievement might have some health benefits in older adults including better functional status (33); good self-reported health(34) higher quality of life and subjective well-being(35); and lower incidence of mobility disability(36). In spite of broad evidence of the higher education level benefits for health problems, still know quite little about its relation with psychological status. (37) The proposed exploratory study aimed to explore the level of loneliness among retired teachers with higher educational achievements and investigate the relationships which exist between demographic characteristics with loneliness and depression in this aged group of the population.

#### Material & Method

This cross-sectional study was conducted among retired teachers over 60 years of age in Babol, a city in the Mazandaran province of Iran. All data were gathered over a 4 month period. Participants were recruited through retired teacher centres and interviewed over their home phones. For some of them, study measurements were posted by mail. From a total of 4120 retired, according to the Morgan sample size table, 351 participants should be entered to the study which 402 subjects were participated which participation rate was 100%. The participants consisted of 290 males and 112 females with a mean age of 68.3 years.

The study was approved by the Ethics Committee affiliated USWR University. All respondents' information was anonymous and only a reference number (along with the date and time of questionnaire completion) and demographic information were used as identifiers. All participants had the option to withdraw from the study at any time. The purpose of the study was explained to the participants individually and written consent was obtained from those who agreed to participate in the study. Participants answered a questionnaire which took approximately 10 minutes to complete. The questionnaire included items that measured variables relevant to demographic status, feeling of loneliness and depression. Demographic variables were age, sex, marital status, educational level, level of income, type of accommodation, population density, years of retirement, level of community participation (clubs or associations) and having a chronic disease with limitation and dependency.

The Social and Emotional Loneliness Scale included 15 items designed to assess social and emotional loneliness. For this purpose, the Social and Emotional Loneliness Scale for Adults (SELSA) <sup>(7)</sup> was applied. It consisted of 15 questions that were answered on a 5-point scale (from "strongly disagree" to "strongly agree") in three dimensions including social, family and romantic subscales, of which the two last subscales produced an emotional loneliness scale.

The Social Subscale consisted of five items, such as, "My friends understand my motives and reasoning". Family Subscales comprised of five items, such as, "My family really cares about me". Likewise, the Romantic Subscale also included five items, such as, "I have a romantic or marital partner who gives me the support and encouragement I need". SELSA scores are useful in measuring the multidimensional experience of loneliness. The published reliability coefficient for this scale ranges from 0.87. Sum and her colleagues reported reliability of this scale of 0.85 (38). For this study, the reliability coefficient was 0.83.

In the third section each subject went through the five-item Geriatric Depression Scale (GDS) (39). Scores 2 or greater on the five-item GDS were used to diagnose the presence of depressive symptoms. The following questions were included in the five-item GDS: "Are you basically satisfied with your life?" "Do

you often get bored?""Do you often feel helpless?""Do you prefer to stay at home rather than going out and doing new things?" and "Do you feel pretty worthless the way you are now?" Positive answers for depression screening are "no" to the first question and "yes" to the other questions. The published reliability coefficient for this scale reported 0.88 <sup>(39)</sup>.

The second stage involved data analysis for the research. The data was analysed using SPSS V18.0 for Windows. Bivariate analysis was conducted to determine whether demographics varied by the dependent variables. Significant variable differences were identified using t-test and one-way ANOVA. Correlations between variables were conducted using Spearman's rank correlation. The proposed research questions were also tested using a series of hierarchical multiple regression equations to evaluate which demographic variable predicted loneliness and depression.

#### Results

Findings showed that most of the respondents were male (74%). Most of the respondents (64.4%) lived with their spouse/partner and children; only 5.1% lived alone. The majority (93.5%) of subjects were married. Most (93.5%) lived in a home or unit that they owned, 5.7% resided in a rented private house or unit, and 1.5% lived in their children's or other family members' homes. Regarding population density, the majority of the respondents (89.9 %) lived in the city. Educational achievement was distributed across levels, indicating that 34.5% completed high school and that 63.4% had completed some undergraduate education. Results showed that just 0.9% had a post graduate certificate. Almost one third of the subjects (34.5%) were working in primary schools. Regarding yearly income, almost half (50.8%) of respondents categorized their income level as moderate and just 5.7% in a good one. They were asked about the level of social participation with the result that just 10.1% had a history of community involvement. Regarding having a chronic disease with limitation and dependency, almost one third (31.7%) reported some kind of problem.

In terms of the feeling of loneliness, the majority of the respondents reported that they were part of a group of friends (76%) who knew their motives and reasoning (67.6%), shared their views (48.3%), understood them (60.4%) and were able to depend on them for help (58.3%). Most reported that they did not feel alone when they were with their family (75.3%) who they could depend on for support and encouragement 63.4%), they felt close (85.1%) and were part of their family (86.9%) who cared about them (86%). Regarding their relationships with spouses, the majority (57.3%) disagreed with "I have an unmet need for a close romantic relationship".

Overall, participants tended to report low levels of social and emotional lone-liness. The data suggest that romantic loneliness had a higher mean in the subjects (M = 3.03 & SD = 2.21), followed by social loneliness (M = 2.92 & SD = 2.14) and family loneliness (M = .49 & SD = .47). Overall, 23.3% of the respondents reported loneliness in which social loneliness was more prevalent (29.4%), followed by romantic loneliness (23.4%) and family loneliness (10.2%).

Regarding loneliness differences between those with diverse demographic characteristics, results showed that, overall, females had a higher rate of loneliness (r=.137~&~p=.025), however males were more likely to have romantic loneliness than females. Regarding the age, results showed that advancing age also increased the possibility of family loneliness. Among those who lived alone, social (r=-.130~&~p=.018) and family loneliness (r=-.168~&~p=.002) were higher. Findings revealed that those who were widowed or separated were more likely to have a higher degree of romantic loneliness (F=5.39~&~P=.001) and those who lived with their friends had a higher degree of family loneliness (F=3.087~&~P=.001). Having a chronic disease with limitation and dependency had a significant relationship with social loneliness (t=2.157~&~p=.032), which means that those who had a history of disease felt are away from their friends.

Spearman correlation showed a significant relationship between feeling of loneliness and depression among the subjects (r=.222 & p=.001). Prevalence of depression among participants was 39.9%. Findings showed that there were differences in the level of depression between those with diverse demographic characteristics as well. The possibility of depression was higher in those with advancing age (r=.125 & p=.023), in singles and widows (r=.164 & p=.003), in those lived in a rent home or unit (r=.141 & p=.01), those with a lower level of education (r=-.130 & p=.018) and income (r=-.215 & p=.001), and those with poorer level of community participation (r=-.130 & p=.018).

Hierarchical multiple regression analyses were conducted to evaluate which demographic variable predicted loneliness and depression. Findings showed that educational level was a predictor for social ( $\beta$  = -.117 & p = .03) and family loneliness ( $\beta$  = -.110 & p = .04) which means those with higher educational achievement had a lower sense of loneliness in those two subsclaes. Results indicate that living alone ( $\beta$  = -.154 & p = .02) was a predictor of family loneliness and being widowed or separated ( $\beta$  = -.276 & p = .001) was a predictor of romantic loneliness. On the subject of depression advanced age ( $\beta$  = .199 & p = .036), having no property ( $\beta$  = .149 & p = .034), living in rural area ( $\beta$  = .138 & p = .045), low level of income ( $\beta$  = -.183 & p = .001) and having a chronic disease with limitation and dependency ( $\beta$  = .155 & p = .012) were predictors (table 1).

Table1: Multiple regression analysis of loneliness subscales, depression and demographic characteristics

Criterion	Significant predictor	β- regression coefficien	P
SL	Educational level	117 [F = 1.53, R <sup>2</sup> = 3%]	.03
ROL	Marital status	.199 $[F = 2.64, R^2 = 6\%]$	.001
FL	Living alone Educational level	154 110 [F = 1.54, R <sup>2</sup> = 2%]	.02 .04
Depression	Age Accommodation Living place Income Illness	.199 .149 .138 183 155 [F = 3.74, R <sup>2</sup> = 13.8%]	.036 .034 .045 .001 .012

Notice: SL = Social loneliness; FL= Family loneliness; ROL= Romantic loneliness.

#### Discussion

Older people are listed among that proportion of the population at highest risk of social exclusion and this risk is worse for those living alone (40). Overall, one out of five of the respondents mentioned that they had experienced a feeling of loneliness. As mentioned in the introduction other studies in Iranian elderly people reported this problem in ranges from 39.4% to 47.7% in different places (30). In terms of depression prevalence was 39.9% which was lower than reported evidence by other scholars in Iran (from 46% to 55.7%). Different results in frequency of feeling loneliness and depression between our findings and the other research in Iran might show that possession of post-basic education can have a protective effect on these problems (41) because all of our subjects were educated and retired teachers. The level of educational achievement is linked to economic improvement. There is evidence to suggest that effective education can support in reducing problems such as unemployment, poor health and crime (42). Education might therefore be measured both a potential element of and an outcome of social participation to reduce feeling of loneliness and depression. On the other side, those who participated in study already were school teachers. Schools can provide a forum for community activity.

Findings showed that loneliness and depression are not uniformly distributed through the participants. There were relationships between loneliness and sociodemographic factors, including being female, being widowed, living alone, being older and having a history of chronic disease. This result is similar to Victor and her colleagues in Great Britain (8) which shows the social epidemiology of loneliness. Vulnerability factors which were identified in this study were marital status; increases in loneliness over the previous decade; increases in time alone over the previous decade; elevated mental morbidity; poor current health; and poorer health in old age than expected. On the other hand, advanced age and possession of post-basic education were independently protective of loneliness (29). As mentioned previously, divorce, the death of a spouse and the end of a romantic relationship can lead to romantic loneliness. Data revealed that romantic and family loneliness were prevalent in separated/divorced females and those who lived alone. This supports the suggestion that loneliness might be a response to the specific change of circumstances of life (6). Remarrying might be a way to reduce the feeling of loneliness, but in Iran, remarriage at older ages is not a common event and is conceived negatively, mostly due to cultural grounds (43). It has been found that advanced age, having no property and low level of income, living in remote area and having a chronic disease with limitation were predictors of depression. For those with lower level of income and those who live in remote area there may be a lack of availability or accessibility to desired activities which put them in depression.

As the results demonstrated, social loneliness was more prevalent. It is reported that loneliness is experienced when significant social interactions are lost <sup>(10)</sup>. As mentioned in the method section, all of the participants were retired. Although retirement might be perceived as an opportunity to experience freedom and a time of rest and peace, there are many factors which may influence this satisfaction. One such factor is changes in life patterns, including individual's roles, self-esteem, moving to a new location, or feelings of loss as a result of leaving employment, relationships, use of time, support groups and life structure <sup>(44,45)</sup>. Indeed, feelings of loneliness might be a kind of psychological distress following retirement. Nuttman-Shwarz, in a study on 56 Israeli men, reported that only 28.6% of the retirees reported that retirement was a positive change; the experience of retirement was seen by a majority of the interviewees as awaiting hardship and a separation from their peers and their social structure <sup>(46)</sup>.

One of the other major findings was the feeling of romantic loneliness among nearly one third of subjects. Having social contact with others, especially with spouses, is generally supposed to be a natural human need and a lack of it is a threat to psychological well-being. Indeed, a lack of a companion with whom to engage in social activities might be the reason for the feelings of loneliness among those who are widowed or separated.

The findings of this research suggest that some preventive and coping strategies should be considered to control and prevent feelings of loneliness and occurring

depression among elderly people. As results showed compare with other studies the level of feeling loneliness and depression among retired teachers was lower than other older populations. Therefore, increasing human capital and encourage people for ownership of post-basic education can have a protective effect on these problems. There are other ways that feeling loneliness amongst the elderly could be addressed (2). For example, by promoting and facilitating more social activity outside the home. However, this option is often impractical or expensive because of poor health, limited mobility and lack of social networks. An alternative option is to provide social support in the home setting. However, this requires intensive resources and may result in dependency. Perhaps a more innovative means of providing social interaction and enhancing social connectedness is to make use of new technologies that enable individuals to access information particularly health information and communicate with others at their leisure through virtual reality. In particular, providing individuals with the opportunity to use technologies such as the Internet may reduce feeling of loneliness (16). Maintaining ties with other people is important for successful ageing (47), and such technologies may provide ways for people to build stronger networks with others.

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