Available online at www.elixirpublishers.com (Elixir International Journal)

Social Science

Elixir Soc. Sci. 123 (2018) 51914-51918

ISSN: 2229-712X

Relationship between Voluntary Service, Social Support and Loneliness

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ARTICLE INFO

Article history:

Received: 16 September 2018;

Received in revised form:

2 October 2018;

Accepted: 8 October 2018;

Keywords

Older Adults,

Loneliness,

Voluntary Service Participation,

Social Support.

ABSTRACT

This study investigated the feelings of loneliness felt by older adults in Keelung City as well as the relationship between demographic variables, voluntary service participation, social support, and the feelings of loneliness felt by older adults. This study looked at the predictive ability of demographic variables, voluntary service participation, and social support in predicting levels of loneliness. This was a cross-sectional study conducted on a population consisting of older adults aged 65 and above. Purposive sampling was used to obtain a valid sample of 364 people. Tools used include the UCLA Loneliness Scale and a structured questionnaire (prepared by the author) which factored in demographic variables, voluntary service participation, and social support. Statistical analysis of the data obtained was carried out using IBM SPSS Statistics 20 (Windows version). Significant differences were found for education level and self-perceived health status. Respondents who graduated from high school or above felt lower levels of loneliness compared to respondents who were illiterate or had only graduated from elementary school; respondents who perceived themselves as having poor health felt greater levels of loneliness compared to normal or healthy respondents. Voluntary service participation and social support were found to be significantly and negatively correlated to the level of loneliness, indicating that respondents felt lower levels of loneliness when they had stronger intentions of participating in voluntary service or received stronger levels of emotional and social support. Together, voluntary service participation, social support, education level, and self-perceived health status explained 36.4% of the variance in loneliness levels. Of these factors, voluntary service participation was the main predictor of loneliness, followed by social support.

Introduction

Loneliness is a widespread social phenomenon which primarily affects older adults (Dykstra, 2009). Older adults feel greater levels of loneliness compared to other age groups (Andersson, 1998). Aging gradually weakens and hinders body functions, sometimes even taking away a person's ability to live independently and take care of himself or herself, it triggers feelings of unease, loneliness and sadness (Chen & Lin, 2006). Loneliness can lead to death and it is also a major risk factor for various diseases (Ye, Hawkley, Waite and Cacioppo, 2012). The older adult population is more prone to loneliness (Lin & Lin, 2007), which is a common experience among older adults (Hazer & Aydiner Boylu, 2010; Savikko, Routasalo, Tilvis, Strandberg & Pitkala, 2005), 40% of older adults had experienced periods of extreme loneliness which gradually affected their lifestyles, and 7% of these people reflected that they felt so much loneliness that it affected them all the time (Victor, Scambler, Bowling & Bond, 2005).

In the United States, 35% to 84% of older adults in the community complained about feelings of loneliness (Lauder, Mummery & Sharkey, 2006). 60.2% of older adults in the community felt moderate to severe levels of loneliness (Wang, Snyder & Kaas, 2001). Krohn and Bergman-Evans (2000) pointed out in their study that 66% of the older adults in nursing homes felt lonely. Loneliness has already affected the health of at least 10% of the older adult population (Forbes, 1996). In Taiwan, a 2005 survey of older adults revealed that 21.8% of older adults in the community felt lonely. Hou (2003) looked at the levels of loneliness felt by older single veterans living in veterans homes, and the results showed that 71.6% of them felt moderate loneliness while 2% experienced strong levels of loneliness.

Feelings of loneliness can easily lead to physical and psychological symptoms such as headache, insomnia, loss of appetite, fatigue, low immune function (Brehaut et al., 2003), and even suicide (Copel, 1988; Lee & Bakk, 2001; McInnis & White, 2001; Rurup et al., 2011). Feelings of loneliness increase the likelihood of developing depression (Cacioppo, Hawkley & Thisted, 2010). Within the context of depression, loneliness is a unique risk factor, among the potential variables (such as loneliness, social support, stress, and demographic characteristics), it is loneliness that interacts with depression after some time has passed, and robs older adults of their happiness (Cacioppo et al., 2006). Loneliness can make some people contemplate suicidal thoughts. Older adults who develop suicidal thoughts are not necessarily affected by mental illness or depression; instead, those feel strong levels of loneliness are more prone to frequent suicidal thoughts (Rurup et al., 2011). People affected by loneliness often shy away from social activities, which affects their

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health and makes them particularly prone to cardiovascular diseases (Shankar, McMunn & Banks, 2011). Loneliness has become an important factor that can cause one's health to decline, and for people affected by severe loneliness, it can lead to death (Rurup, Deeg, Poppelaars & Kerkhof, 2011). Failure to appropriately deal with loneliness can easily lead to feelings of hopelessness (Hicks, 2000). The lonelier a person is, the more likely life may be perceived negatively (Copel, 1988; Ribeiro, 1989; Zhang & Yang, 1999; Yang, 2001) and feelings of loneliness may increase which can affect health, interpersonal relationships, and lifestyles (Beal, 2006).

In summary, feelings of loneliness affect the physical and mental health of older adults, particularly when it comes to mental illnesses such as depression, hypochondriasis, and even suicide. Loneliness may also give rise to negative emotions such as emptiness, isolation, meaningless (life), and loss of self-worth. There is thus an urgent need for us to gain an in-depth understanding of the loneliness problem that is affecting older adults at a personal and practical level. The objectives of this study were as follows:

1.Understand the distribution of the participants' socio-demographic variables, voluntary service participation and social support, as well as their level of loneliness.

2.Investigate the relationship between the participants' level of loneliness and their socio-demographic variables, voluntary service participation, and social support.

3.Investigate the predictive ability of the participants' socio-demographic variables, voluntary service participation, and social support with respect to their levels of loneliness.

Research and methods

Research framework

The research framework (Figure 1) was proposed for this study based on the research objectives and literature review in this study. This study was primarily an investigation of the relationship between the participants' level of loneliness and their socio-demographic variables, voluntary service participation, and social support.

Participants and sampling

In light of time, manpower, and resource-related considerations, older adults aged 65 and above in Keelung City were the population of this study. Purposive sampling was used to select a sample which consisted of older adults who received influenza vaccination at health centers in Keelung City. These people were interviewed by a trained interviewer who collected data via individual interviews.

Research tools

1. UCLA Loneliness Scale: This study used the UCLA Loneliness Scale Version 3 (Russell, 1996) to determine the level of loneliness felt by respondents. The scale comprises 20 questions, each graded on a scale from 1 to 4: "I never feel this way" (1 point), "I rarely feel this way" (2 points), "I sometimes feel this way" (3 points), "I often feel this way" (4 points). The total score for the scale ranges from 20 to 80 points with a higher score representing a greater level of dissatisfaction with society; i.e., greater sense of loneliness (for questions 1, 5, 6, 9, 10, 15, 16, 19, and 20 the scores are reversed; i.e., 1 point = 4 points, 2 points = 3 points, 3 points = 2 points, 4 points = 1 point).

2. Emotional and social support scale: Professor Chang-Ming Lu's Chinese version of the Emotional and Social Support Scale was used as the social support scale in this study. It primarily evaluates the degree to which participants feel about the actual level of helpfulness of emotional support. This scale consists of six questions; each question is scored using a four-level scale, with the lowest and highest scores being 6 and 24 points, respectively. The higher the total score, the more social support a participant has. Conversely, a lower score means that the participant had received less social support. This scale, which is in Chinese, offers a good level of reliability and validity. It was used by Kuo (1982) to evaluate women in rural areas and by Yeh (2007) to evaluate women who had abnormal pap smear test results. The Cronbach's α in this study was 0.98.

3. Participation in voluntary services: The transtheoretical model for the phases of behavioral change was used to break the voluntary service behavior into five phases: 1. precontemplation: no plans to become a volunteer within the next six months; 2. contemplation: plans to become a volunteer within the next six months; 3. preparation: plans to participate in voluntary services on a weekly basis within the coming month; 4. action stage: already participating in weekly voluntary services (for fewer than six months); 5. maintenance stage: has been participating in weekly voluntary services for at least six months. The model was scored on a scale from 1-5 with a higher the score indicating a stronger intent to participate in voluntary services.

4. Demographic variables: gender, age, marital status, education level, self-perceived health status, number of children, number of chronic diseases. Tools: Revised and prepared according to research framework and the relevant literature.

Data collation and analysis

Data archiving

The collected data was encoded and entered into the computer after being checked for errors. Statistical analysis was carried out using IBM SPSS Statistics 20.0.0 (Windows version).

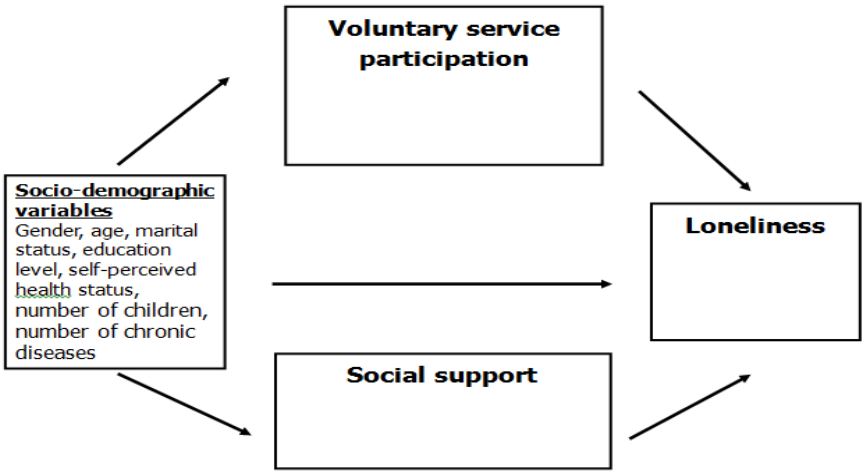

Figure1. Research framework.

Statistical methods

1. Descriptive statistics

(1)The demographic variables of the participants were analyzed using frequency distribution and percentage analysis.

(2)The distribution of voluntary service participation, social support, and loneliness level was analyzed using mean, standard deviation, maximum value, and minimum value.

2. Inferential statistics

(1)T-test and one-way analysis of variance (ANOVA): Differences among different demographic variables, with respect to volunteer service participation, social support, and loneliness level, were analyzed. During the analysis of significant differences, Scheffé's method was used to carry out post-hoc comparisons. Dunnett's T3 was used to conduct post-hoc tests whenever variance heterogeneity occurred.

(2)Pearson product-moment correlation coefficient: The relationship between the participants' voluntary service participation and loneliness levels, and between their social support and loneliness levels, were analyzed,

(3)Multiple regressions: The explanatory power of the participants' demographic variables, volunteer service participation, and social support with respect to their loneliness, was analyzed. The statistical test standard for this study was set to $\alpha = .05$.

Results

1. Socio-demographic distribution

The sample population comprised 6,995 older adults aged 65 or above living in Ren'ai District, Keelung City. After invalid persons were excluded, the final sample population included 364 older adults. To determine if the recruited sample could adequately represent the population, a chi-square goodness of fit test was conducted on the "gender" variable, which showed that the distribution of "gender" (X^2=2.0, p >.05) of the sample did not differ significantly from the population, i.e., the older adults included in this study were a good statistical representation of the population.

The information for socio-demographic distribution is provided in Table 1. Of the participants, 49.5% were female and 50.5% were male. The biggest age group was the 71-75 (39.0%) group, followed by the 65-70 group (30.2%). With regard to marital status, the majority were married (68.1%). In terms of education, the largest group was the illiterate group (68.7%), followed by the group comprising those who had only received elementary school education (15.4%). With regard to children, most had 4-5 children (50.0%) and lived with them (51.1%). Most of them felt that they enjoyed good interactions with family members (73.1%). More than 60% perceived themselves as being economically well-off (62.1%); about 80% (80.2) perceived themselves as being in good health; about 60% suffered from 1-2 chronic diseases (66.5%).

2.Emotional social support, voluntary service participation and happiness scores

Emotional social support, voluntary service participation, and happiness scores are provided in Table 2. Emotional social support comprised six questions. The higher the score, the stronger the level of emotional social support that one is receiving. The participants' emotional social support scores ranged 7-24 points with a mean score of 20.06 (±5.44) points, indicating that they received a high level of emotional social support. The higher the score for volunteer service participation, the stronger a participant's intention is to participate in voluntary services. The participants' intention to participate in voluntary services was at a moderate level, with a mean score of 2.40 (±1.40) points. The loneliness scale consisted of 20 questions, and a higher total score implies a stronger subjective sense of loneliness. For the loneliness scale, the participants scored 20-54 points with a mean score of 34.47 (±13.62), showing that they subjectively felt loneliness to a relatively lesser degree.

3. Relationship between socio-demography and loneliness

In the analysis of the relationship between socio-demography and loneliness (Table 3), only education level and self-perceived health status produced statistically significant differences. Participants who graduated from high school or higher education felt less lonely compared to those who were illiterate or had only received elementary school education. Those who perceived themselves to be in poor health felt a greater sense of loneliness compared to the normal and healthy groups.

4.Correlation between emotional social support, voluntary service participation, and loneliness

Voluntary service participation and emotional social support were negatively correlated to loneliness levels, indicating that the stronger a participant's intention to participate in voluntary services, or the more emotional social support that a participant receives, the less loneliness that he or she would feel (Table 4)

Voluntary service participation was further analyzed by dividing and analyzing the sample; the sample was divided into a group consisting people who participated in voluntary services and a group consisting those who did not. The results indicated that those who participated in voluntary services felt less lonely. When voluntary service participation was broken down into the five phases and analyzed, it was shown that as a participant progressed from the "precontemplation" to the "participating for six months or more" phase, he or she would gradually feel less lonely.

5. Multiple regression for loneliness

Multiple regressions was used for predictive analysis. Of the items covered above, those that produced statistically significant differences were designated as independent variables, of which categorical variables were turned into dummy variables, and loneliness was then analyzed as a dependent variable using multiple regression (Table 6).

Four factors, namely voluntary service participation, emotional social support, education level, and self-perceived health status, explained 36.4% of the variance for loneliness. Voluntary service participation was the primary predictor of loneliness, followed by emotional social support.

Discussion

The research results showed that the participants who had received more emotional social support felt less lonely subjectively. These findings are consistent with those of past studies (Lin & Lin, 2007; Russell, 1996; Forbes, 1996; Pinquart & Sorenson, 2003). Emotional social support had a considerable influence in alleviating the emotional stress felt by older adults. When an older adult receives a high level of emotional support, he or she would experience the joy of his or her emotional needs being recognized. This strengthens his or her confidence and thus reduces his or her sense of loneliness.

The results indicated that a stronger intention to participate in voluntary services correlated with less loneliness and that those who participated in voluntary services felt less lonely. This was consistent with previous studies (McAuley, 2000; Stevens, 2000; Miriam et al., 2001). As a participant's involvement in volunteering progressed from the "precontemplation" to the "participating for six

months or more" phase, his or her level of loneliness would decline as well, indicating that participating in voluntary services would encourage an older adult to make changes to his or her personal life, which can not only reduce feelings of loneliness, but also strengthen one's sense of self-worth, as a result, these older adults will be more inclined to continue participating, which creates a virtuous circle.

The research results revealed that voluntary service participation, emotional social support, education level, and self-perceived health status, explained 36.4% of the variance in loneliness levels. Of these factors, voluntary service participation was the primary predictor of loneliness, followed by emotional social support. With regard to standardized regression coefficients, participants who only received elementary school education felt higher levels of loneliness, hence this group requires special attention and care. Voluntary service participation is the main predictor of loneliness. Through their participation in voluntary services, older adults are able to gain many meaningful experiences, which will expand their social networks and resources, raise their sense of self-worth and self-efficacy, and therefore allow them to gain the emotional satisfaction that will reduce their loneliness. And the longer one's participation in voluntary services, the less lonely one feels. The results also confirm that as involvement in volunteering progressed from "precontemplation" to "participating for six months or more", older adults' levels of loneliness declined; this finding is consistent with those discussed in the literature review (Lin & Lin, 2007; Russell, 1996; Forbes, 1996; Pinquart & Sorenson, 2003).

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