THE ROLE OF SOCIO-DEMOGRAPHICS IN PREDICTING LONELINESS AMONG SENIOR CITIZENS

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ABSTRACT:

Objective: Given that the global population aging at an accelerated rate. Similarly, loneliness is becoming more common among the elderly. Many research has been done on the prevalence of loneliness among elderly people and found that elderly people have more loneliness due to their transition in physical, psychological and social roles. The present study aims to investigate the role of sociodemographic factors on predicting loneliness among Senior Citizen. **Method:** Two groups of survey among 300 elderly people (150 living with family and 150 living in old age home) completed De Jong GierVeld Loneliness Scale along with the socio demographic details. Regression analysis was used to analyse the influence of sociodemographic factors on Loneliness. T-test and ANOVA were performed to investigate the difference in emotional loneliness and social loneliness with respect to sociodemographic factors. **Results:** The results indicates that elderly women, widow, private working, financially dependent, solitary hobbies and occasional visit of children have high loneliness. **Conclusion:** The findings indicate that older people are at risk for loneliness. Changes in lifestyle and social support from family and friends can combat loneliness.

Key words: Loneliness, adjustment, Mental Health, Retirement, Elderly.

INTRODUCTION:

Worldwide, aging population is rapidly increasing which was reported by WHO 2022. UNFPA report, it is projected that India's elderly population will double in 2050, as of July, 2022 the population of elderly is 10.5% to 20.8% in 2050. Seniors are more likely to be neglected and lonely as a result of longer lifespans, reduced combined families, and a deteriorating social network.

Loneliness is a feeling of emptiness even when surrounded by people (Cacioppo & Cacioppo, 2018b). Loneliness is reported highest in the older adults due to the transitional changes in their physical, psychological and social roles. Retirement is one the major change in the elderly people life where they transit from working to non-working, this majorly effects their mental health due to the routine life changes.



One of the important indicators of Quality of life among Senior citizen is Loneliness. Several researchers have analyzed the association of loneliness with older population. Changing Lifestyle, living environment (living alone or living in old age home) is one of the main demographic cause of loneliness (P. Srivastava & Srivastava, 2023). Loneliness is being viewed as a public health concern (Cacioppo & Cacioppo, 2018a). loneliness of elderly people is associated with poor social skills, introversion (Cacioppo & Cacioppo, 2018b). Loneliness negatively affects one's Physical health, mental health, social relationships. Loneliness increases the risk of dementia, anxiety and depression (Holt-Lunstad et al., 2015), cardio vascular diseases (Xia & Li, 2018), lower subjective well-being (Ong et al., 2016).

According to the disengagement theory is, "aging is an unavoidable, mutual withdrawal or disengagement, resulting in decreased interaction between the aging person and others in the social system to which he belongs" (Cumming E,1961). Weiss (1973) differentiated two components of loneliness – Emotional Loneliness, which is absence of close or intimate relationship or absence of emotional bonding. Other component is social loneliness which is the absence of social engagement.

Prevalence of loneliness:

A study conducted in 2022 has reported that in India, 20.5% of adults aged 45 plus reported moderate loneliness, and 13.3% reported severe loneliness in a LASI survey (Pengpid & Peltzer, 2021). In 2022, 86% of the senior respondents from Mumbai who participated in an annual poll by the NGO reported living with family; yet, 75% of them expressed dissatisfaction about feeling abandoned and alone ("Silence around Loneliness, a Growing Public Health Hazard," 2023).

Factors predicting loneliness:

Age is one of the important sociodemographic factors that must be noticed to predict the loneliness. According to research, loneliness tends to increase during young adulthood, decline during middle adulthood, and then gradually escalate until the very older years (Qualter et al., 2015). Age is the most vigorous risk factor for loneliness (Shovestul et al., 2020). Gender, marital status, income and educational attainment, self-reported health, functional status, mental health are all linked to loneliness in late adulthood (Franssen et al., 2020; Tapia-Muñoz et al., 2022). boredom and inactivity, the role of recent losses of family predicts loneliness (Cohen-Mansfield et al., 2016a).

The present study

The previous research clearly shows that loneliness is associated to various factors, it would be beneficial for studies to investigate such factors in order to understand the relative strength of their relationships with loneliness.

- 1. To analyse the prevalence of loneliness among Senior Citizen in Salem District.
- 2. To investigate the role of socio-demographic factors on the loneliness.



3. To examine the difference in dimensions of loneliness with respect to socio-demographic factors.

METHODOLOGY:

The data used in the present study were obtained from a cross-sectional study includes Senior Citizens living with Family and living in old age home. The sample of the present investigation was randomly selected. Sample comprised of 300 (150 living in old age home and 150 living with family) aged 60 to 80 years in Salem District. The participants responded the sociodemographic details along with Loneliness Scale.

Loneliness was assessed using De Jong GierVeld Loneliness Scale (2006) which is based on Weiss (1973) theory of emotional and social loneliness. It has 6 items (3 social loneliness and 3 emotional loneliness) with 3-point scale Yes, more or less, no. The scores 0 and 1 represented the category "not lonely," and the scores 2 to 6 the category "lonely" (De Jong Gierveld & Van Tilburg, 1999).

Hypotheses:

1. Prevalence of loneliness will be higher among senior citizen

2. Age, Gender, type of job at retirement, source of income, education, marital status, children visit, leisure time activity will have influence on the Loneliness.

3. There will be a significant difference in the loneliness with respect to sociodemographics.

Data Analysis

Descriptive statistics, t-test and Regression analysis was used to investigate whether socio demographic factors predict Loneliness. Data analysis was carried out using the statistical program package SPSS 20.0.

RESULTS

Sample characteristics

Participants were 300 Senior citizens, where 150 from old age home and 150 Living with family. The average age of the elderly in this present research was 70.5 years (60 - 94years). Among 300 elderly 127 were male and 173 were female. Table no. 1 shows the socio demographics characteristics of the sample.

Prevalence of Loneliness among Senior Citizen

Table 1:



Prevalence rates for not lonely and lonely with respect to gender and living environment of senior citizen

	Ν	lot lonely	I	onely
Total Sample	95	31.66%	205	68.3%
Gender				
Male = 127	45	35.43%	82	64.5%
Female = 173	50	28.9%	123	71.09%
Living environment				
Living in old age home = 150	37	24.6%	113	75.3%
Living with family = 150	58	38.6%	92	61.3%

De Jong Gierveld Loneliness Scale score for Elderly (N = 300).

The prevalence of loneliness is shown in Table 1 (also stratified by gender and living environment). About 31.6% of the Elderly were not lonely, and 68.3% of the elderly were lonely. Amongst 127 males, 64.5% were Lonely whereas among 173 females, 71.09% were lonely. Among 150 Living in old age home, 75.3% were lonely whereas among 150 living with family, 61.3% were lonely.

Role of sociodemographic factors on Loneliness

Table 2:

Results of Linear Regression Analysis of sociodemographic factors predicting on Loneliness among Elderly living in old age home

			95% CI				
Predicting Variable	Beta	SE	LL	UL	β	р	
Gender	.790	.312	.173	1.407	.186	.013*	
Education	410	.181	769	052	178	.025*	
Marital Status	.299	.112	.077	.522	.206	.009*	
Job at the time of Retirement	-1.904	.633	-3.155	653	219	.003*	
Are you working after retirement	.097	.481	854	1.049	.015	.840	



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Source of Income	.308	.373	429	1.045	.069	.410
children visit	-1.028	.173	-1.369	687	391	.000*
Leisure time activities	891	.326	-1.535	247	200	.007*
Sleep Quality	522	.301	-1.118	.074	126	.085
	2					

Note. * p < .05. (R = 0.672; $R^2 = 0.451$)

Table 2 results of regression analysis shows the experience of loneliness among elderly living in old age home was significantly associated with Gender, Marital Status, Education, children visit, Job at the time of Retirement and Leisure time activities that account for 45.1% of variance in predicting Loneliness among Living in old age home Elderly F= 12.78, p<.05, $R^2 = 0.45$.

Table 3:

Results of Linear Regression Analysis of sociodemographic factors predicting on Loneliness among Senior Citizens living with Family

	95% CI							
Variable	Beta	SE	LL	UL	β	р		
Gender	.563	.273	.022	1.103	.174	.041*		
Education	.038	.147	254	.329	.021	.799		
Marital Status	.090	.103	114	.293	.078	.384		
Job at the time of Retirement	665	.382	-1.421	.091	165	.084		
Source of Income	.095	.332	562	.752	.029	.775		
children visit	264	.214	686	.158	101	.218		
Leisure time activities	540	.273	-1.079	001	167	.050*		
Sleep Quality	766	.312	-1.383	149	219	.015*		

Note. * p<.05. (R = 0.501; $R^2 = 0.252$)

Table 3 results of regression analysis shows the experience of loneliness among senior citizens living with family was significantly associated with Gender, Leisure time activities and sleep quality that account for 25.2% of variance in predicting Loneliness F= 5.236, p<.05, $R^2 = 0.252$.



Table 4:

Difference in Emotional Loneliness and Social Loneliness with respect to socio demographic factors

	Emotional I	Loneline	ess	Social Loneliness				
Characteristics	(n)	(%)	M (SD)	F(df)	Р	M (SD)	F(df)	Р
Gender								
Male Female	12 7 17 3	42.3 57.6	1.58 (1.14) 1.37 (1.13)	.003 (298)	.110	1.16 (1.18) 1.12 (1.08)	5.41 (298)	.784
Marital Status								
Married Divorced Widow/Widowe r	16 2 17 12 1	54 5.6 40.3	1.21 (1.10) 1.71 (1.21) 1.77 (1.10)	6.11 1 (297)	.000* *	.98 (1.03) 1.88 (1.31) 1.24 (1.17)	3.97 6 (297)	.008' *
Education								
Illiterate Primary Secondary Higher	27 64 11 6 93	9 21.3 38.6 31	1.81 (1.30) 1.69 (1.05) 1.65 (1.05) .97 (1.10)	9.24 5 (296)	.000* *	1.74 (1.45) 1.27 (1.11) 1.15 (1.14) .86 (.91)	4.92 4	.002* *
Job at retirement								
Private Govt	26 1 39	87 13	1.59 (1.12) 0.59 (.81)	11.5 7(29 8)	.000* *	1.22 (1.13) 0.59 (0.91)	5.56 (298)	.001* *

Source of Income



Personal	12	42.3	1.15 (1.13)	.999	.000*	.94 (1.11)	.763	.011*
Others	7	57.6	1.69 (1.69)	(298	298 *	1.28 (1.11)	(298	
Others	17	57.0	1.09 (1.09))		1.20 (1.11))	
	3							
Living Environment								
With family	15	50.0	1.13 (1.01)	2.92	.000*	0.93 (0.91)	54.6	.002*
old age home	0	50.0	1.79 (1.16)	5 (296	*	.34 (1.27)	0 (298	*
	15 0))	
	0							
Children visit								
Frequently	14	49.6	1.05 (1.01)	22.6	.000* *	.80 (.830)	15.6	.000* *
Occasionally	9	33.3	2.04 (1.05)	1(29 8)	Ť	1.56 (1.26)	5 (296	-1-
Never	10 0	14.6	1.68 (1.13)	,		1.48 (1.28))	
No Children	44	2.3	0.43 (.787)			.14 (.378)		
	7							
Leisure Time								
Solitary	18	62	1.82 (1.08)	.936	.000*	1.26 (1.16)	3.37	.013*
Social	6	38	0.87 (.97)	(298	*	0.93 (1.03)	(298	
	11))	
	4							
Sleep Quality								
Poor	12	41	2.07(.993)	3.29	.000*	1.46 (1.12)	.133	.000*
Good	3	59	1.03 (1.03)	4 (298	*	.091 (1.07)	(298	98 *
	17			(298			J	
	7			,				

Note: All analyses were performed using ANOVAs, and Bonferroni correction was used when the results were significant; * Highlights significant statistical differences.

Analyses were carried out in order to assess whether sociodemographic characteristics would significantly differ in the emotional loneliness and social loneliness of elderly people



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(Table). It was found that there is no significant difference in both dimensions of loneliness (Emotional and Social) with respect to Gender. Results shows that there was significant difference in Emotional loneliness with respect to Marital Status, Education, Job at retirement, Source of Income, Living Environment, Frequency of children visit, Leisure Time and Sleep Quality (p = .000). Furthermore, there were significant difference in social loneliness with respect to Marital Status (p = .008), Education (p = .002), Job at retirement (p = .001), Source of Income (p = .011), Living Environment (p = .002), Frequency of children visit (p = .000), Leisure Time (p = .013) and Sleep Quality (p = .000).

Discussion:

The prevalence rate of Loneliness among Senior Citizen is high. 68.3% of the total study population felt lonely in elderly age. Among the total population Living in old age home elderly female have high loneliness compared to male. The previous studies support the prevalence of loneliness higher in older women compared to older men (H. Chang et al., 2023; Dahlberg et al., 2022a). A study conducted in Iran reported that Living in old age home elderly have high loneliness (Jokar, 2018).

In regression analysis, it is found that the experience of loneliness among was elderly living in old age home significantly associated with Gender, Marital Status, Education, children visit, Job at the time of Retirement and Leisure time activities which accounts 45.1% prediction. Whereas, loneliness among elderly living with family was significantly associated with Gender, Leisure time activities and sleep quality which accounts 25.2%. Gender and Leisure time activities have significant impact on both elderly living in old age home and living with family. The result is supported with the previous systematic review reported that variables female, unmarried, older age, living alone, low education, low social network is significantly associate with loneliness (Cohen-Mansfield et al., 2016a).

As we analyzed demographic characteristics, we found that marital status, education, living environment, frequency of children visits, leisure time, type of job at retirement, source of income and sleep quality has significant difference in both Emotional and Social loneliness, where has gender has no significant difference in Emotional and Social loneliness.

From the demographic table it was found that widow/ widower has high emotional loneliness whereas divorced have high social loneliness. Losing of a lifelong partner creates strong emotional void which heightens the emotional loneliness among elderly widowhood (Jiao et al., 2023).

Higher the education lowers the loneliness among senior citizens reported in the study. Low level of education is the major cause of loneliness among older people (Savikko et al., 2005).



The elderly with personal source of income have less loneliness than those depending on others. Elderly people fulfil their wishes in life when they have their personal income. Higher the income lower the loneliness (Aylaz et al., 2012)

The elderly people in the old age home reported high social and emotional loneliness compared to elderly living with family. Loneliness results due to lack of social connections, lack of family support and living alone.

The elderly report high loneliness with the occasional visits of children than never visits or no children. Older people who are socially surrounded within a traditional multigenerational family have a greater sense of purpose within the family (Silverstein et al., 2006).

The elderly people those spends leisure time socially have less loneliness comparing to those spending time in solitary activities. Engaging in social activities and regular contact with friends prevent the loneliness (Pettigrew, 2007).

The sleep quality of the elderly people effects their loneliness. Poor sleep quality is associated with the higher loneliness mong older people (Deng et al., 2023)

Conclusion:

The present study investigated the role of socio demographic factors on loneliness among senior citizen. Based on the attained findings, the following conclusions are made.

- 1. The prevalence is high in loneliness among senior citizens. 68% of elderly reports loneliness.
- 2. Elderly female living in old age home have high loneliness compared to elderly male.
- 3. Gender, Marital Status, Education, frequency of children visit, Job at the time of Retirement and Leisure time activities is associated with loneliness among senior citizen living in old age home.
- 4. Gender, Leisure time activities and sleep quality is associated with loneliness among elderly living with family.
- 5. Role of sociodemographic variables have major impact on the loneliness.
- 6. Engaging in social activities can reduce the loneliness among Senior Citizens.

The current study proposes that future researchers do in-depth research into the problem of older people using various study designs, evaluate the potential risk factors that link with loneliness, and take the required efforts to overcome senior citizen loneliness.

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