

Happiness and Social Support Among Elderly Residents in Coastal Ernakulam: A Cross-Sectional Study

Devi Unnikrishnan

Amrita Vishwa Vidyapeetham

Manjusha V Nair

Amrita Vishwa Vidyapeetham

Chitra Tomy

chitratomy@aims.amrita.edu

Amrita Vishwa Vidyapeetham

Brilly M Rose

Amrita Vishwa Vidyapeetham

Parvathi Sureshkumar

Amrita Vishwa Vidyapeetham

Rohith Suresh

Amrita Vishwa Vidyapeetham

Research Article

Keywords: elderly, happiness, social support

Posted Date: August 26th, 2026

DOI: <https://doi.org/10.21203/rs.3.rs-10025863/v1>

License:   This work is licensed under a Creative Commons Attribution 4.0 International License. [Read Full License](#)

Additional Declarations: No competing interests reported.

Abstract

Background: Advancing age brings a decline in physical and emotional strength, leaving the elderly increasingly vulnerable. As the population ages, health priorities shift toward aging-related issues like mental and psychological problems. With India's growing elderly population, recognizing and addressing their emotional and social needs has become increasingly important in the healthcare system.

Objectives: This study aims to assess happiness and perceived social support among the elderly in coastal Ernakulam and to find the association between these two factors.

Methods: A community-based cross-sectional study was conducted among 136 elderly individuals (≥ 60 years) in Njarackal, Ernakulam. Participants were randomly selected from an electoral list. Happiness and social support were assessed using the Oxford Happiness Questionnaire (OHQ) and the Multidimensional Scale of Perceived Social Support (MSPSS), respectively.

Results: Among 136 elderly individuals, 75.7% were found to be happy based on the Oxford Happiness Questionnaire. Perceived social support showed a strong association with happiness. Participants with low or moderate support had 14.6 times higher odds of not being happy compared to those with high support ($p < 0.001$), highlighting its significant influence.

Conclusion: The study highlights a high level of happiness among the elderly in the coastal area of Ernakulam, with perceived social support playing a key role. Those with lower support were significantly less happy, underscoring the importance of strengthening social networks and community-based support systems to enhance well-being in older adults.

INTRODUCTION

Population ageing is one of the most significant demographic transformations of the twenty-first century. According to the World Health Organization (WHO), the proportion of people aged 60 years and above is expected to double globally from 12% in 2015 to 22% by 2050, with nearly 80% of older adults residing in low- and middle-income countries. While increased longevity reflects advances in healthcare and living conditions, it also poses substantial challenges related to psychological well-being, social integration, and quality of life among older adults. [1] Beyond physical health, contemporary gerontological research increasingly recognizes happiness and perceived social support as critical components of successful and healthy ageing.[2]

Happiness, often conceptualized as subjective well-being, encompasses emotional experiences, life satisfaction, and a sense of purpose [3]. Among older adults, happiness has been associated with better mental health, lower mortality risk, enhanced functional ability, and improved coping with age-related adversities [4]. Conversely, declining social roles, bereavement, chronic illnesses, and reduced economic independence may adversely affect emotional well-being in later life. Social support, defined as the perceived availability of emotional, informational, and instrumental assistance from family, friends, and significant others, acts as a protective factor that buffers stress and promotes psychological resilience among the elderly [5, 6].

Globally, empirical evidence consistently demonstrates a positive association between social support and happiness in older populations. Studies from Europe, East Asia, and the Middle East report that elderly individuals

with stronger family ties and active social networks exhibit higher happiness scores and better overall well-being [7, 8, 9].

In India, the ageing scenario is evolving rapidly. As per the Census of India 2011, the elderly population constituted 8.6% of the total population, a figure projected to rise to nearly 20% by 2050 [10]. This demographic shift is occurring alongside profound social changes, including urbanization, migration of younger family members, and a gradual erosion of traditional joint family systems. These transitions have altered the lived experiences of older adults, often increasing their vulnerability to loneliness, social isolation, and psychological distress [11]. National-level studies have reported that inadequate social support is significantly associated with depression, poor life satisfaction, and lower happiness among Indian elderly populations [12, 13].

Kerala represents a unique demographic context within India, characterized by one of the highest proportions of elderly individuals, high life expectancy, and advanced epidemiological transition [14]. Coastal elderly populations may experience compounded vulnerabilities due to economic insecurity, environmental risks, and changing family dynamics, which may affect their perceived social support and emotional well-being.

Although several Indian studies have explored depression and quality of life among older adults, there is a relative paucity of research specifically examining happiness and its relationship with perceived social support, particularly in coastal community settings. Existing literature largely focuses on institutionalized elderly or urban populations, limiting the generalizability of findings to community-dwelling older adults in coastal areas [15, 16].

Against this backdrop, the present study aims to assess the level of happiness and perceived social support among elderly individuals residing in the coastal area of Ernakulam district, Kerala, and to examine the relationship between the level of happiness and perceived social support among the elderly.

METHODS

A community-based cross-sectional study was conducted in Njarakkal Panchayat, a coastal area of Ernakulam district, Kerala, India, over a period of two months. The study population comprised individuals aged 60 years and above who were permanent residents of the selected coastal wards. Elderly persons living in the community and willing to participate were included in the study. Individuals with previously diagnosed psychiatric disorders, dementia, or those who were bedridden were excluded, as these conditions could affect the reliable assessment of happiness and perceived social support.

The sample size was calculated using the mean and standard deviation of happiness scores reported in a previously published study by Moeini et al. [8], which documented a mean happiness score of 40.45 ± 16.19 among older adults. Using an absolute precision of 3% and accounting for a 10% non-response rate, the final sample size was estimated to be 123 participants.

A simple random sampling technique was employed for the selection of study participants. The electoral roll (2002) of Njarackal Panchayath was used as the sampling frame. From this list, households were selected using simple random sampling. Subsequently, a household survey was conducted in the selected households, and all eligible elderly individuals aged 60 years and above who met the inclusion criteria were included in the study. In households with more than one eligible elderly individual, one participant was selected by lottery method.

Happiness was assessed using the Oxford Happiness Questionnaire (OHQ), a standardized and validated instrument comprising 29 items that measure various dimensions of psychological well-being, including positive affect, life satisfaction, sense of purpose, and self-esteem. Each item is rated on a Likert scale, and the total score is calculated by summing the item responses, with higher scores indicating greater levels of happiness [17].

Perceived social support was assessed using the Multidimensional Scale of Perceived Social Support (MSPSS), a validated 12-item instrument designed to measure perceived support from three sources: family, friends, and significant others. Each item is rated on a seven-point Likert scale ranging from very strongly disagree to very strongly agree. Scores for each subscale, as well as the overall score, are calculated by averaging the responses, with higher scores reflecting greater perceived social support [18].

The study was conducted after obtaining written informed consent from all participants. Ethical approval was obtained from the Institutional Ethics Committee (ECASM-AIMS-2026-055). The study was conducted in accordance with the principles of the Declaration of Helsinki.

Data were entered into Microsoft Excel (Microsoft Corp., Redmond, WA) and analysed using Jamovi 2.6.2 (retrieved from <https://www.jamovi.org>) and SPSS v22 (IBM Corp., Armonk, NY, USA). Descriptive statistics were used to summarize continuous variables as means and categorical variables as proportions. The association between socio-demographic variables, family characteristics, perceived social support, and happiness status was assessed using the Chi-square test or Fisher's exact test, as appropriate.

Variables with a p-value of less than 0.2 in bivariate analysis were included in a multivariable logistic regression model to identify independent predictors of 'not happy' status. Adjusted odds ratios (aOR) with 95% confidence intervals (CI) were calculated. A p-value of less than 0.05 was considered statistically significant.

RESULTS

A total of 136 elderly participants were included in the study. The mean age of the study participants was 68.9 ± 6.94 years. More than half of the study participants were aged between 60–69 years (53%) and were females (56%). Most participants had a primary (40%) or high school education (41%), and were unemployed (60%). About 64.7% were currently married, while 33.8% were widowed and 61% were from the APL socioeconomic category. Nearly equal proportions lived in nuclear (49%) and three-generation families (49%), with most households comprising five or fewer members (70%). (Table 1)

Table 1
Sociodemographic characteristics of the elderly (n = 136)

Variable	Category	Frequency(n)	Percentage (%)
Age	60–69 years	72	52.9
	70–79 years	53	39
	80–89 years	11	8.1
Gender	Female	76	55.9
	Male	60	44.1
Education	Graduate	18	13.2
	High school	56	41.2
	Higher secondary	7	5.1
	Illiterate	1	0.7
	Primary	54	39.7
Marital status	Divorced	2	1.5
	Married	88	64.7
	Widowed	46	33.8
Occupation	Employed	24	17.6
	Retired	31	22.8
	Unemployed	81	59.6
SES	APL	83	61
	BPL	53	39
Type of family	Joined	5	3.7
	Nuclear	65	47.8
	Three generation	66	48.5
Social network*	Marriage	64	
	Religious groups	118	
	Geriatric clubs	6	
	Political meetings	3	
Number of family members	> 5 members	41	30.1
	≤ 5 members	95	69.90
Pension	Yes	104	76.5
*Multiple responses			

Variable	Category	Frequency(n)	Percentage (%)
	No	32	23.5
*Multiple responses			

The distribution of happiness levels among the study participants is shown in Table 2. Most of the participants reported positive levels of happiness, with 43% were 'rather happy' and 27% were 'very happy'.

Table 2
Distribution of Happiness Levels among the elderly

Happiness level	Frequency	Percentage (%)
Not happy	1	0.70%
Not particularly happy or unhappy	32	23.50%
Somewhat unhappy	6	4.40%
Rather happy	58	42.60%
Too happy	2	1.50%
Very happy	37	27.20%

Table 3
Bivariate analysis of sociodemographic factors, perceived social support and happiness among the elderly (n = 136)

Variable	Category	Happy n (%)	Not Happy n (%)	p-value
Age Category	60–69 years	56 (77.8%)	16 (22.2%)	0.592*
	70–79 years	40 (75.5%)	13 (24.5%)	
	80–89 years	7 (63.6%)	4 (36.4%)	
Gender	Female	53 (69.7%)	23 (30.3%)	0.066
	Male	50 (83.3%)	10 (16.7%)	
Marital Status	Married	73 (83.0%)	15 (17.0%)	0.008
	Widowed/Divorced	30 (62.5%)	18 (37.5%)	
Education	Primary/Illiterate	34 (61.8%)	21 (38.2%)	0.001*
	High School/Higher Secondary	51 (81.0%)	12 (19.0%)	
	Graduate	18 (100.0%)	0 (0.0%)	
Occupation	Employed	17 (70.8%)	7 (29.2%)	0.078*
	Retired	28 (90.3%)	3 (9.7%)	
	Unemployed	58 (71.6%)	23 (28.4%)	
SES	APL	69 (83.1%)	14 (16.9%)	0.012
	BPL	34 (64.2%)	19 (35.8%)	
Type of Family	Joined	3 (60.0%)	2 (40.0%)	0.313*
	Nuclear	47 (72.3%)	18 (27.7%)	
	Three Generation	53 (80.3%)	13 (19.7%)	
Pension	No	28 (87.5%)	4 (12.5%)	0.099*
	Yes	75 (72.1%)	29 (27.9%)	
Family Size	> 5 members	66 (69.5%)	29 (30.5%)	0.009*
	≤ 5 members	37 (90.2%)	4 (9.8%)	
Perceived Support	High	64 (95.5%)	3 (4.5%)	< 0.001*
	Low/Moderate	39 (56.5%)	30 (43.5%)	

Figure 1 shows the distribution of perceived social support among the study participants. Nearly half of the participants (49%) had high overall support, while 42.6% had moderate and 8.1% had low support. Family support was the strongest domain, with 61% reporting high support, whereas high support from friends was only 38%.

The happiness variable was recategorized into a binary outcome. Responses of not happy and not particularly happy or unhappy were grouped as Not Happy, while responses of somewhat unhappy, rather happy, too happy, and very happy were grouped as Happy for subsequent analyses. Married elderly had more happiness than widowed or divorced ($p = 0.008$). Also, participants who had completed high school or higher levels of education were happier than those with lower educational status ($p = 0.001$). Participants belonging to the Above Poverty Line (APL) had higher levels of happiness than those from the Below Poverty Line (BPL) group ($p = 0.02$). Elderly individuals living in smaller families (≤ 5 members) were happier than those residing in larger households (> 5 members) ($p = 0.009$). About perceived social support, those with high perceived support were happier than those with low or moderate support ($p = 0.001$). (Table 4)

Table 4
Multivariable Logistic Regression of factors associated with Happiness level (n = 136)

Variable	Category	Happy n (%)	Not Happy n (%)	aOR (95% CI for aOR)	p-value
Number of Family Members	≤ 5 members	37 (90.2%)	4 (9.8%)	2.9 (0.866–9.711)	0.084
	> 5 members (ref)	66 (69.5%)	29 (30.5%)	1	
Perceived Support	Low/Moderate	39 (56.5%)	30 (43.5%)	14.562 (94.127–51.388)	< 0.001
	High (ref)	64 (95.5%)	3 (4.5%)	1	
Nagelkerke R ² = 0.340					

In multivariable logistic regression analysis (backward stepwise), perceived social support emerged as a significant independent predictor of ‘not happy’ status. Participants with low or moderate support had significantly higher odds of being not happy compared to those with high support (aOR = 14.56, $p < 0.001$). Although participants living in households with five or fewer members had lower odds of being not happy, this association was not statistically significant (aOR = 2.9, $p = 0.084$). The model explained 34% of the variance in happiness status (Nagelkerke $R^2 = 0.340$). (Table 6)

DISCUSSION

The study found that a majority of participants reported positive levels of happiness, with 42.6% being rather happy and 27.2% very happy. Nearly half of the participants (49.3%) perceived high overall social support, while 42.6% had moderate and 8.1% had low support.

The present study found that certain family-related factors were associated with happiness. While the type of family (nuclear vs. three-generation) was not significantly associated with happiness, family size was significant at the bivariate level, with smaller households (≤ 5 members) reporting higher happiness ($p = 0.009$). However, this association is not statistically significant in multivariable analysis. This suggests that while household composition may influence well-being, its independent effect is weaker compared to perceived social support.

Indian literature indicates that the quality of interpersonal relationships, rather than mere co-residence, is more predictive of psychological outcomes among the elderly [12].

A strong and statistically significant association was observed between perceived social support and happiness ($p < 0.001$), with 95.5% of those having high support being happy compared to only 56.5% among those with low or moderate support. In multivariable logistic regression analysis, perceived social support emerged as an independent predictor of happiness, with individuals having low or moderate support showing significantly higher odds of being 'not happy' (aOR = 14.56, $p < 0.001$). The model explained 34% of the variance in happiness (Nagelkerke $R^2 = 0.340$).

The significant association between social support and happiness in this study is consistent with a study by Moeini et al. in Iran, which reported a significant positive correlation between MSPSS scores and happiness among the elderly, reinforcing the cross-cultural validity of this relationship [9]. Similarly, Lee S H et al. [19] reported that social support is one of the strongest predictors of subjective well-being among older adults.

The present study also observed that family support constituted the strongest domain of social support, with 61.0% reporting high support from family members, compared to only 37.5% reporting high support from friends. A study conducted in rural central India by Khandre et al. using the MSPSS reported similar findings that more than half of the elderly had high perceived social support, with family playing a central role in providing emotional and social support [20]. However, comparatively lower support from friends in this study suggests limited peer interaction among the elderly, which may affect their social engagement and emotional well-being. A study by Zimet et al. (1988), who developed the Multidimensional Scale of Perceived Social Support, emphasized the importance of perceived support from family, friends, and significant others in promoting mental well-being [10].

This study provides community-based evidence from a coastal elderly population, an understudied group in Indian gerontological research. The use of standardized and validated instruments (OHQ and MSPSS) enhances comparability with international literature [9, 10]. Random sampling strengthens internal validity. However, the cross-sectional design precludes causal inference. Self-reported measures may be subject to response bias. Exclusion of elderly individuals with diagnosed psychiatric illness or severe disability may have led to overestimation of happiness levels. Additionally, the study was conducted in a single coastal panchayat, limiting generalizability to other settings.

Despite these limitations, the findings in the present study demonstrated that perceived social support is a strong independent predictor of happiness among elderly residents in coastal Ernakulam, reinforcing the need for strengthening both familial and community-based support systems for healthy ageing.

CONCLUSION

This community-based study among elderly residents in coastal Ernakulam demonstrates that a substantial proportion of older adults report moderate to high levels of happiness, with nearly three-fourths categorized as happy. Perceived social support emerged as the strongest independent predictor of happiness, with elderly individuals reporting low or moderate support having significantly higher odds of not being happy compared to those with high support. These findings reinforce the conceptual understanding that psychosocial resources, particularly supportive social networks, are critical determinants of healthy ageing.

From a public health perspective, the results highlight the importance of strengthening family bonds, community engagement, and structured social support mechanisms within ageing populations, especially in coastal settings undergoing social and demographic transitions. Integrating psychosocial well-being into geriatric health programs, promoting community-based elderly groups, and reinforcing social protection systems may contribute meaningfully to sustaining happiness and quality of life among older adults.

Abbreviations

OHQ - Oxford Happiness Questionnaire

MSPSS - Multidimensional Scale of Perceived Social Support

Declarations

Ethics Declaration and Consent to Participate

Ethical approval for the study was obtained from the Ethics Committee Amrita School of Medicine (ECASM) and written informed consent was secured from all participants. The study was conducted in accordance with the principles of the Declaration of Helsinki.

Written informed consent was obtained from all participants prior to the commencement of data collection. The purpose of the study was explained in the local language, and participation was entirely voluntary with the assurance of confidentiality.

Consent for Publication

Not applicable

Availability of Data and Material

The datasets used in the current study are available from the corresponding author on reasonable request.

Conflicts of Interest / Competing Interests

The authors declare that they have no conflicts of interest or competing interests related to this study.

Funding

The authors received no specific funding for this work.

Author Contributions

Devi Unnikrishnan, Manjusha V Nair, Parvathi Sureshkumar and Rohith Suresh, were involved in the study conception and design. Manjusha V Nair and Devi Unnikrishnan contributed to data collection and field verification. Parvathi Sureshkumar and Rohith Suresh were involved in data verification and analysis. Brilly M Rose contributed to the statistical analysis and interpretation of the results. Chitra Tomy supervised the overall study and contributed to the critical revision of the manuscript. All authors were involved in drafting or revising the manuscript for important intellectual content and approved the final version of the manuscript.

Acknowledgements

The authors sincerely acknowledge the staff of the Rural Health Training Centre (RHTC), Amrita, Njarackal, for their valuable support and cooperation during the conduct of this study. We also extend our heartfelt gratitude to all the elderly participants for their time, participation, and contribution to this research.

References

1. World Health Organization. World report on ageing and health. Geneva: WHO. 2015. Available from: <https://www.who.int/publications/i/item/9789241565042>
2. Beygi Z, Solhi M, Irandoost SF, Hoseini AF. The relationship between social support and happiness in older adults referred to health centers in Zarrin Shahr, Iran. *Heliyon*. 2023;9(9):e19529. 10.1016/j.heliyon.2023.e19529.
3. Diener E, Suh EM, Lucas RE, Smith HL. Subjective well-being: Three decades of progress. *Psychol Bull*. 1999;125(2):276–302. 10.1037/0033-2909.125.2.276.
4. Steptoe A, Deaton A, Stone AA. Subjective wellbeing, health, and ageing. *Lancet*. 2015;385(9968):640–8. 10.1016/S0140-6736(13)61489-0.
5. House JS, Landis KR, Umberson D. Social relationships and health. *Science*. 1988;241(4865):540–5. 10.1126/science.3399889.
6. Uchino BN. Social support and health: A review of physiological processes. *J Behav Med*. 2006;29(4):377–87. 10.1007/s10865-006-9056-5.
7. Lu L, Argyle M. Receiving and giving support: Effects on relationship and well-being. *Counselling Psychol Q*. 1992;5:123–33. 10.1080/09515079208254456.
8. Pinquart M, Sörensen S. Influences on loneliness in older adults: a meta-analysis. *Basic Appl Soc Psychol*. 2001;23(4):245–66. 10.1207/153248301753225702.
9. Moeini B, Barati M, Farhadian M, Ara MH. Association between social support and happiness among elderly in Iran. *Korean J Fam Med*. 2018;39(4):260–5. 10.4082/kjfm.17.0121.
10. Office of the Registrar General & Census Commissioner, India. Census of India 2011. New Delhi: Government of India. 2011. Available from: <https://censusindia.gov.in>
11. Ingle GK, Nath A. Geriatric health in India: concerns and solutions. *Indian J Community Med*. 2008;33(4):214–8. 10.4103/0970-0218.43225. . PMID: 19876492; PMCID: PMC2763704.
12. Dey AB, Nambiar D, Lakshmi JK, Sheikh K, Reddy KS. Health of the elderly in India: challenges of access and affordability. *World Health Popul*. 2012;13(4):24–33. Available from: <https://www.longwoods.com>
13. Patel V, Prince M. Ageing and mental health in a developing country: who cares? Qualitative studies from Goa, India. *Psychol Med*. 2001;31(1):29–38. 10.1017/S0033291799003098.
14. Beneficiary [Internet]. Thiruvananthapuram (KER). Social Justice Department; [cited 2026 Jan 22]. Available from: https://sjd.kerala.gov.in/beneficiary-info.php?benef_sl=Mw==
15. George LK. Social factors and illness. In: Binstock RH, George LK, editors. *Handbook of aging and the social sciences*. 6th ed. San Diego: Academic; 2006. pp. 217–34. <https://doi.org/10.1016/B978-012088388-2/50015-0>.
16. United Nations Department of Economic and Social Affairs. World Population Ageing. 2019. New York: United Nations; 2019. Available from:

17. Hills P, Argyle M. The Oxford Happiness Questionnaire: A compact scale for psychological well-being. *Pers Individ Dif*. 2002;33(7):1073–82. 10.1016/S0191-8869(01)00213-6.
18. Zimet GD, Dahlem NW, Zimet SG, Farley GK. The Multidimensional Scale of Perceived Social Support. *J Pers Assess*. 1988;52(1):30–41. 10.1207/s15327752jpa5201_2.
19. Lee SH, Lee H, Yu S. Effectiveness of Social Support for Community-Dwelling Elderly with Depression: A Systematic Review and Meta-Analysis. *Healthc (Basel)*. 2022;10(9):1598. 10.3390/healthcare10091598.
20. Khandre RR, Raut A, Mundra A. Social support status of the elderly population in selected villages in a Central India district. *Indian J Community Med*. 2023;48(2):291–6. 10.4103/ijcm.ijcm_249_22.

Figures

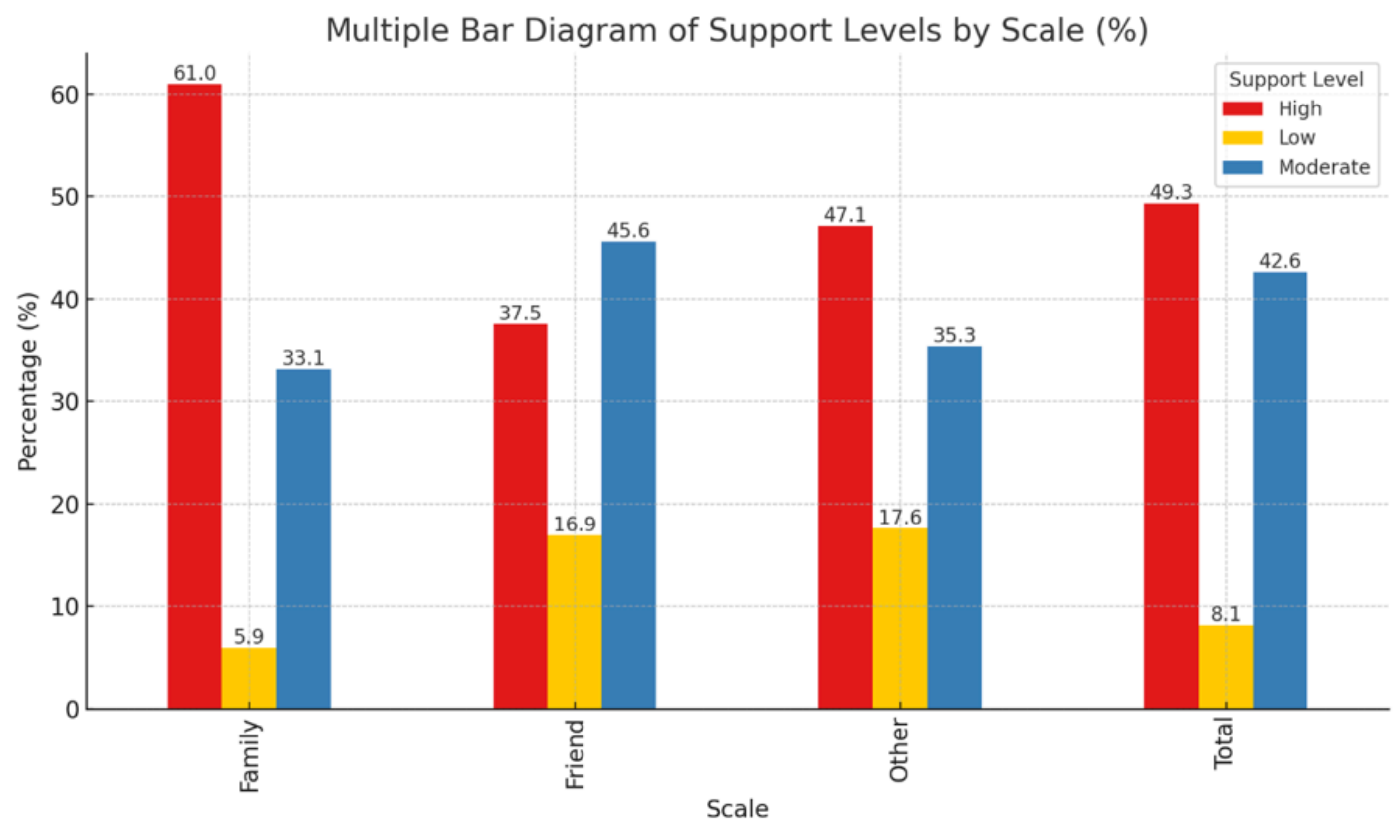


Figure 1

Distribution of Perceived Social Support among the elderly