

LIVING ARRANGEMENTS AND SOCIAL SUPPORT AS PREDICTORS OF MENTAL HEALTH AND LIFE SATISFACTION OF OLDER ADULTS

CHHANDA KARMAKER*, AFROZA HOSSAIN, FARIEA BAKUL AND SUMAIA ALI RAISA

Department of Psychology, University of Dhaka, Dhaka-1000, Bangladesh

Key words: Living arrangements, Social support, Mental health, Life satisfaction

Abstract

The aim of the present study was to investigate whether living arrangement and social support are significant predictors of mental health and life satisfaction among older adults. Data were collected by using convenience sampling technique from 300 older adults (100 living in old home and 200 living in their own home with spouse or children) of Dhaka and Gazipur districts. The instruments used for collecting data were: (1) Demographic and personal information questionnaire, (2) Bangla version of Social Support Scale, (3) Bangla version of General Health Questionnaire (GHQ-12) and (4) Bangla version of Satisfaction with life scale. The results of the current study indicated that the type of living arrangement has the most influence towards mental health (29.05%) and life satisfaction (30.91%) than social support. Older adults who live in own home have higher life satisfaction ($M = 25.86$) and less mental health problems ($M = 32.55$) than those living in old home ($M = 17.78$) and ($M = 39.80$). The result also revealed that older people living in old homes have higher social support ($M = 51.73$) than those who are living with children, spouses or other family relatives ($M = 48.02$).

Introduction

An individual passes five phases in the lifespan where old age starts after 60 years of age leading to death. In this stage, people experience decreased physical strength combined with possible psychological disorders in many instances. Furthermore, due to continuous transition in social system, the nuclear family is increasing in Bangladesh rapidly like other countries. As a result, leaving the older people behind separated from their family in most cases⁽¹⁾.

Old age is a period that is often seen to be marked by loneliness, escalating with approaching death. Thus, the living arrangement of elderly people has huge effect on their perceived mental health and life satisfaction. Living arrangement is the most immediate social environment formed by the family, which provides a locus of social roles and social relations⁽²⁾. There are various types of living arrangements which determine the role of individuals in a household and the different amount and types of

*Author for correspondence: <chhanda.karmaker@gmail.com>.

resources available to individuals. Life satisfaction in old age may differ due to their living style. Prior research findings suggested that subjective well-being was higher for those who lived with family members such as spouse or children rather than who lived alone. Cong and Silverstein⁽³⁾ found in China that living in a three-generation household was most beneficial to older parents' psychological well-being.

Life satisfaction is found to be an important component of successful aging. Successful aging is a universal phenomenon, which is not the same across the different age groups, and it may differ from person to person. Some accomplish a sense of fulfillment and satisfaction in old age, while others may turn harsh and hostile to the changes of old age and lament on the decline of their physical activities⁽⁴⁾. However, having higher socioeconomic status, adequate family support, higher level of satisfaction with one's living environment, and living in their own home among the family members plays an important role in achieving successful aging^(5,6).

In addition, Chen and Short⁽⁷⁾ found that older Chinese in multi-generational households and older Koreans living with married sons had less depressive symptoms and better life satisfaction and perceived good health. Li *et al.*⁽⁸⁾ also found evidence of a positive link between living with adult children and self-rated health due to an increase of older adults' sense of pride as well as instrumental and emotional support received from co-residence.

Social support systems including religion, education, marriage, occupation, active daily life status living arrangement, diet, transportation, family support and emotional support have a positive impact on the life satisfaction of elderly people^(9,10). Higher life satisfaction may require social support which refers to the various types of support (emotional and instrumental) that people receive from others. While, life satisfaction has been defined as 'an internal and subjective perception, the individuals' evaluation of their lives⁽¹¹⁾; many studies have confirmed the contributions of social supports to the life satisfaction of older people⁽¹²⁾.

Another variable of this present research is mental health that can be defined as a state of well-being in which every individual realizes his or her own potential, can cope with the normal stresses of life, can work productively and fruitfully, and is able to make a contribution to his or her community⁽¹³⁾. In this positive sense, mental health is the foundation of individual well-being and the effective functioning of a community. A person living with a mental health problem may experience numerous effects as they face a number of difficulties in day to day lives. Sereny⁽¹⁴⁾ found out whether or not an actual living arrangement matches that person's preferred living arrangement can also influence the general health and psychological well-being among older adults.

This study can be linked with the Convoy Model of Social Relations⁽¹⁵⁾ that provides a theoretical perspective of the lifespan development of social relationships⁽¹⁶⁾. This theory conceptualizes close social relationships as a convoy that represents various

resources which provide support for individuals throughout their life span. A social convoy has important effects on both health and psychological well-being⁽¹⁷⁾.

Living arrangement can be considered a type of social convoy of intergenerational relations, as it provides support throughout the life span including both instrumental (e.g., physical help, financial assistance) and emotional support⁽¹⁸⁾. As individuals have the most proximate social relations in their household, the living arrangements of individuals and changes in living arrangements of individuals affect their overall health and well-being.

Due to economic solvency and improved medical care elderly population is growing worldwide and the same trend exists in Bangladesh also. But the continuous transition in the social system caused the shift from joint to nuclear family and older adults are being separated from the family and placed in old home. Thus, the researchers interested to figure out whether living arrangement and social support have any effect on mental health with life satisfaction among the older adults in our country. The findings of this study will help to understand some psychological conditions of elderly population in Bangladesh.

Materials and Methods

The participants of this study consisted of a total of 300 older adults (male and female) who were taken from old home (rehabilitation center) and own homes by using convenient sampling technique with cross sectional survey method. Out of 300 participants 100 were from the old home located in Gazipur and Dhaka districts whose age ranged from 60 to 80 years. The comparison group consisted of 200 old adults with the same age range, who were living in their own home under the supervision of their children in the same districts. Education level of the participants was from primary schools to university graduations. Those who were able to communicate general conversation with other people were included in the present study.

To collect the data, the present study was used the following instruments.

Demographic and personal information questionnaire: This questionnaire was used to collect information about respondents' age, gender, place of residence, educational level, and Socio-economic status.

Social support scale: The Bangla version translated by Shimul and Islam⁽¹⁹⁾ of the social support scale originally developed by Pearson⁽²⁰⁾ was used to measure the extent of social support. Necessary modifications were made for this scale after determining inter-judge agreement during adapting this scale. The scale has a high test-retest reliability (satisfaction $r = 0.77$, importance $r = 0.87$) and the validity of this test is also good. The scale consisted of 12 items. Each item had two dimensions, level of importance and level of satisfaction to be measured at 5 points scale. The importance scale ranged from very

important to not all important while the satisfaction scale ranged from completely satisfied to completely unsatisfied. The highest possible score of social support scale is 120 and lowest possible score is 24. Lower score in this scale indicates greater importance or greater satisfaction. This social support scale also provides an index of numbers of available members of social support.

General health questionnaire (GHQ-12): The General Health Questionnaire (GHQ) developed by Goldberg⁽²²⁾ was used to measure mental health of respondents. The Cronbach's alpha coefficient for internal consistency of Bangla version⁽²¹⁾ was 0.82. The 12 item scale contains 6 positive and 6 negative items. It is a Likert type scale which has 4 points response choices typically scoring from 0 - 3. The highest possible score of this scale is 36 and lowest possible score is 0. Higher scores in the scale indicate the high mental health problems.

Satisfaction with life scale: The Bangla version⁽²³⁾ of satisfaction with life scale developed by Diener *et al.*⁽²⁴⁾ was used to measure global satisfaction with life of respondents. Significant correlation between English and Bangla version 0.626 indicated translation reliability of the scale. This scale consists of 5 items having 7 points response choices from 1 - 7. The highest possible score of this scale is 35 and lowest possible score is 7. Higher scores in the scale indicate high level of life satisfaction.

The authors and research assistants collected all the data with the help of standard procedure. Researchers have been trained earlier on how to collect data. Proper authority of the institutions was formally approached for permission. After obtaining permission, contacted a concerned person assigned to helping data collection. Before administering instruments, rapport was established with each participant. It was given the following general instructions that these questionnaires ask about personal feelings and other support; the answers will be completely anonymous and confidential and will be used only for research purposes. Beside these, each participant was given separate instruction for each questionnaire and they were allowed to ask freely if they had any questions regarding any item of the scale. Research assistants have read the questionnaires to the participants and then record their responses. Demographic and personal information of the respondents were also collected from them. It took about 55 to 60 minutes for collecting data from one respondent. To control the fatigue effect, the research assistants took some short breaks during the survey and spent a quality time with the respondents. After completing the questionnaires, the respondents were thanked for his or her cooperation.

Results and Discussion

Regression and independent sample t-test were conducted to analyze the data.

Regression of mental health on living arrangement and social support is presented in Table 1.

Results in Table 1 indicated that living arrangement was only significant predictor of mental health and the model explains 30.8% of the variance in older adult's mental health. We found that older adults have 0.545 times less mental health problem who live in own home with family ($\beta = -.545$) than those who live in old home. Furthermore, part correlation coefficients in this table indicate that the unique contribution to the variance in mental health was highest for living arrangement (29.05%) followed by social support (0.52%). From previous studies it was also found that an individual's type of living arrangement, the amount of social support effect a person's life satisfaction⁽⁷⁾. The type of living arrangements has high impact on an individual's good mental health and wellbeing, getting better support from society which cumulatively leads to a satisfied life. Regression of life satisfaction on living arrangement and social support is presented in Table 2.

Table 1. Regression of mental health on living arrangement and social support.

Predictor variables	Unstandardized coefficients		Standardized coefficients	t	P	r_p	$r_p^2 \times 100$
	B	SE	B				
(Constant)	48.625	1.378		35.292	0.000		
Living Arrangement	-7.118	0.635	-0.545	-11.217	0.000	-0.539	29.05%
Social Support	-0.035	0.024	-0.073	-1.495	-0.136	-0.072	0.52%

Adjusted $R^2 = 0.308$ ($F_{2,297} = 67.667$, $p < 0.05$).

Table 2. Regression of life satisfaction on living arrangement and social support.

Predictor variables	Unstandardized coefficients		Standardized coefficients	t	P	r_p	$r_p^2 \times 100$
	B	SE	B				
(Constant)	30.944	1.568		19.734	.000		
Living arrangement	-8.334	0.722	-0.561	-11.541	-0	-0.556	30.91%
Social support	0.068	0.027	0.122	2.510	0.013	0.121	1.46%

Adjusted $R^2 = 0.306$ ($F_{2,297} = 67.011$, $p < 0.05$).

Results in Table 2 revealed that living arrangements and social support were significant predictors of life satisfaction and the model explains 30.6% of the variance in older adult's life satisfaction. It is found that older adults have 0.561 times less life satisfaction who live in old home than those who live in own home with family ($\beta = -0.561$). The result also revealed that one unit change in social support is responsible

for 0.122 times more unit change in life satisfaction ($\beta = 0.122$). In addition, part correlation coefficients in this table indicate that the unique contribution to the variance in life satisfaction was maximum for living arrangement (30.91%) followed by social support (1.46%). This finding is consistent with Chan⁽²⁵⁾ where older people who lived with their child or relatives were found to have good psychological well-being, and in the study of Bowung, et al.,⁽¹²⁾ the role of social support on life satisfaction was confirmed and mental health is closely linked with life satisfaction⁽¹³⁾. Asiatic society is collective in nature which may cause this link. Older adults in our country expect to spend their last span of life with their children and other family members. It is less concern for them how much they receive support from others, but the fact that makes them satisfy in life is whether they are living with their children or not. This may be the reason for getting the above findings of this research.

Comparison of older adults living in old home and own home in respect of social support is presented in Table 3.

Table 3. Comparison of older adults living in old home and in own home in respect of social support.

Group	M	Sd	t	p
Old home	51.73	12.214	2.423	0.000
Own home	48.02	12.216		

* $p < 0.05$.

In addition, the mean scores in Table 3 provided support that older adults who live in old home ($M = 51.73$) have higher social support than those in own home ($M = 48.02$). In the current study, the elderly, who live alone and away from family are getting support from other elderly people living with them rather than living with children and other family member. The reason may be that in old home older adults are occupied with several other older people who are much more in the same condition and provide each other social and emotional support. They may share common views, common phenomena and understand each other properly.

Comparison of older adults living in old home and in own home in respect of mental health is presented in Table 4.

Results under Table 4 also revealed that, although people living in old home has higher social support but they have higher mental health problem ($M = 39.80$) too than those living in own home ($M = 32.55$). Because older adults in old home are detached from their dear ones (most of the time from their children), they always miss them, worry for them and also may not be able to contact them while necessary. In many cases the older parents of our country are less synonymous with the technological advancements and prefer to be in physical proximity of their children rather than being connected with

them via the virtual world. As a result, they feel depressed, anxious and have other symptoms of mental problems. In general, previous research⁽³⁾ suggested that living arrangements can affect psychological well-being through characteristics associated with relationships in the household. Thus being away from children and close relatives can increase the likelihood of any mental health problems.

Comparison of older adults living in old home and in own home in respect of life satisfaction is presented in Table 5.

Table 4. Comparison of older adults living in old home and in own home in respect of mental health.

Group	M	Sd	t	p
Old home	39.80	4.763	11.513	0.000
Own home	32.55	5.852		

*p < 0.05.

Table 5. Comparison of older adults living in old home and in own home in respect of life satisfaction.

Group	M	Sd	t	p
Old home	17.78	6.069	11.202	0.000
Own home	25.86	5.821		

*p < 0.05.

Table 5 indicated that the older adults who live in own home (M = 25.86) have higher life satisfaction than those in old home (M = 17.78). This result is consistent with previous findings that life satisfaction is higher for older adults who lived with a spouse or children compared to those who lived alone⁽²⁶⁾.

Like any other study, this study also has some limitations. Generalization of the findings is limited as the present study involved participants of only from two districts. We were not able to collect response from all of old homes in Bangladesh due to time and financial constraints. It is recommended that further study is needed to take larger sample from all old homes to make any conclusive statement in this regard.

Acknowledgement

The first two authors gratefully acknowledge the Biotechnological Research Centre for providing financial assistance for the research work as research grant.

References

1. Bangladesh Bureau of Statistics (BBS) 2003. *Population Report*. Ministry of Planning, Government of the People's Republic of Bangladesh, Dhaka.
2. Hughes ME and LJ Waite 2002. Health in household context: Living arrangements and health in late middle age. *Journal of Health and Social Behavior* **43**(1): 1-21.
3. Cong Z and M Silverstein 2004. Intergenerational living arrangements, social support exchange and the psychological well-being of older people in rural China. *The Gerontologist* **44**: 377.
4. Stalbrand IS, T Svensson, S Elmstah, V Horstmann, B Hagbergm, O Dehlin and G Samuelsson. 2007. Subjective health and illness, coping and life satisfaction in 80-year-old Swedish population-implications for mortality. *Int. J. Behav. Med.* **14**: 173-180.
5. Freund AM and M Reidiger 2003. Successful aging. *In*: RM Lerner, MA Easterbrooks, J Mistry (Eds.), *Handbook of Psychology*. Vol. 6. Developmental Psychology, pp. 601-628. New York, NY. John Wiley & Sons Inc. doi:10.1002/0471264385.wei0625
6. Chou KL and I Chi 2002. Chronic Illness and depressive symptoms among Chinese older adults: A longitudinal study. *International Journal of Aging and Human Development* **54**: 159-171.
7. Chen F and SE Short 2008. Household context and subjective well-being among the oldest old in China. *Journal of Family Issues* **29**(10): 1379-1403.
8. Li W, J Zhang and J Liang 2009. Health among the oldest-old in China: Which living arrangements make a difference? *Social Science and Medicine* **68**: 220-227.
9. Krause N 2004. Common facets of religion, unique facets of religion, and life satisfaction among older African American adults. *Journal of Gerontology B: Psychology and Social Sciences* **59**(2): S109-S117.
10. Yeh SC, CT Shih, CH Chuang and SF Tsay 2004. The Relationship between Social Supports and Life Satisfaction for Elderly in Kaohsiung. *Management Review* **12**(2): 399-427.
11. Neugarten BL, RJ Havighurst and SS Tobin 1961. The measurement of life satisfaction. *Journal of Gerontology* **16**: 134-143.
12. Bowung A, M Farquha and P Browne 1991. Life satisfaction and associations with network and support variables in three samples of elderly people. *International Journal of Geriatric Psychiatry* **6**: 549-566.
13. World Population Ageing 2013. Department of Economic and Social Affairs Population Division, United Nations. New York, 2013: Available from: <http://www.un.org/en/development/desa/population/publications/pdf/ageing/WorldPopulationAgeingReport2013.pdf>. Retrieved on February, 2017.
14. Sereny M 2011. Living arrangements of older adults in China: The interplay among preferences, realities, and health. *Research on Aging* **33**(2): 172-204.
15. Antonucci TC 2001. Social relations: An examination of social networks, social support and sense of control. *In*: Birren JE and Schaie KW (Eds.), *Handbook of the psychology of aging*(5th ed., pp. 427-453). New York: Academic Press.

16. Wahl HW and FR Lang 2004. Aging in context across the adult life: Integrating physical and social research perspectives. *In: HW Wahl, R Scheidt, PG Windley (eds.) Aging in context: Socio-physical environments* (Annual Review Gerontology and Geriatrics, 2003). pp.1-33. New York: Springer.
17. Fiori KL, TC Antonucci and KS Cortina 2006. Social network typologies and mental health among older adults. *Journal of Gerontology: Psychological Sciences* 61: 25.
18. Antonucci TC, KS Briditt and H Akiyama 2009. Convoys of Social relations: An interdisciplinary approach. *In: Battes P, O Brim (Eds.). Life span development and behavior* (vol. 3). Academic Press, 23-286.
19. Shimul AM and S Islam 2007. Effects of value system and social support on psychological well-being. *The University Journal of Psychology* 31: 49-60.
20. Pearson RE 1979. *The personal support system survey: Network structural and interactive indices data*. Unpublished manuscript. Syracuse University, Syracuse, New York.
21. Ilyas, QSM and S Aysha 2002. *General health questionnaire (GHQ-12)*. Unpublished Manuscript. Department of Psychology, University of Dhaka.
22. Goldberg D 1978. *Manual of the General Health Questionnaire*. Windsor: NFER.
23. Ilyas QSM 2002. *Bangla version of Satisfaction with life scale (SWLS)*. Unpublished Manuscript. Department of Psychology, University of Dhaka.
24. Diener E, RA Emmons, RJ Larsen and S Griffin 1985. The satisfaction with life scale. *Journal of Personality Assessment* 49: 71-75.
25. Chan A 2005. Aging in Southeast and East Asia: Issues and policy directions. *J. Cross Cultural Gerontology* 20: 269-284.
26. Gow AJ, A Pattie, MC Whiteman, LJ Whalley and IJ Deary 2007. Social support and successful aging: Investigating the relationship between lifetime cognitive change and life satisfaction. *Journal of Individual Differences* 28: 103-115.

(Manuscript received on 29 August, 2017; revised on 26 October, 2017)