



Predictors Of Self Rated Health Among Elderly Men And Women: A Prospective Study

Subramanyam.V^{1*}, Kalavathi, P.², and., Jamuna.D.³

¹ * Visiting Faculty, Department of Clinical Psychology, Sri Padmavathi Mahila Visvavidyalayam, Tirupati, India.

²Assistant Professor, Department of Sociology, Mount Carmel college, Bengaluru, India

³Professor of Psychology, Former Vice Chancellor, Sri Padmavathi Mahila Visvavidyalayam (Women's University),Tirupati, India.

Citation: Subramanyam.V et Al. (2024), Predictors Of Self Rated Health Among Elderly Men And Women: A Prospective Study.

Services Educational Administration: Theory And Practice, 30(4), 813-818

Doi: 10.53555/kuey.v30i4.1571

ARTICLE INFO

ABSTRACT

The majority of older persons worry about their health and the possibility of impairment, particularly as they reach 60 years of age. Western and Eastern longitudinal research on elderly people have shown that self-rated health is one of the cognitive markers of long life. Self-efficacy attitudes about health serve as a moderator variable that influences both physical and emotional wellbeing. Considering the aforementioned, information on SRH has been gathered from a three-year perspective study that involved three cohort groups (55–60; 61–65; 66–70). A sample of 480 senior men and women who lived in communities and belonged to various social classes (schedule class, schedule tribe, and general open category - non-SC & ST groupings) were selected from the following age groups: 50–59 (N = 160), 60–69 (N = 160), and 70–79 (N = 160). The study employed a multistage random selection technique to select participants from rural areas in the districts of Chittoor, Kadapa, and Nellore. A significant prediction of personality, stress, physical and mental activity, health behaviour motivation, and health behaviour practices to self-rated health has been found among 480 middle-aged and older men and women over the course of three years of testing. Implications for health care are addressed.

Key Words : Self-Rated Health, Personality, Objective Health, Elderly, Prospective Study

Introduction

When assessing an aged person's health, one crucial psychological factor to consider is their self-rating of health. Several future health outcomes, including mortality (Benyami & Idler, 1999), new morbidity (Bosworth & Schaie, 1997), functional ability (Idler & Kasl, 1995), hospitalization and health care utilization, recovery from illness, and future physical ratings of health (Maddox & Doughlass, 1973), have been linked to self-perception of health (SAH) and have attracted interest.

A greater dependency on support and health-related services is related to aging. Physical, psychological, and social health issues are commonly associated with aging in a complicated and interconnected manner. Globally, 11% of people were 60 years of aged in 2007; by 2050, this percentage is expected to rise to 22%. The physical aspects of aging are the focus of most public policy discussions, whereas social elements like social support are frequently ignored. With fewer social resources and less sufficient social support, older adults experience significant losses in terms of frequency of contact and subjectively perceived support.

Additionally, physical activity (PA) is essential for sustaining mobility and health as people age. Research on the health advantages of PA is stronger for persons 65 and older than for any other age group due to the more dire implications of inactivity in this demographic. Additionally, older adults with high social support networks may find it easier to reach the necessary PA than older adults with weaker social support networks, which would preserve their physical and mental well-being (Bohm, Mielke, & da Cruz, 2015). Evaluating the correlations of elderly people's subjective self-rated health is one of the study's objectives.

There are numerous approaches to understand and assess health. Respondents are frequently asked to provide a general assessment of their personal health in health surveys and questionnaires. Self-ratings of health may

include feelings of psychological well-being in addition to physical health, which is one way that they differ from medical ratings of health. There are few studies that report SRH in the general population. In contrast to SRH, certain indications offer concrete proof of an individual's health state, such as conditions that have been identified by doctors in the past and present as well as clinical parameters that are measured in a hospital. They have been referred to as "objective" or "actual" health. A number of health-related variables, including work strain, life habits, health history, and demographics, are strongly correlated with one's actual state of health (Jozefien, Heejung & Batja, 2015). In order to achieve this, an attempt has been made to investigate the contributions of psychological variables viz., Personality, stress, physical and mental activities, social supports, health behaviour practices, trait anger, state anger, and anger control to self-rated health. These variables have all been included in the study and have been put through multiple regression analysis in time1, time2, and time 3.

Objectives:

To examine the prediction of psychological variables viz., personality, social supports, health behavior motivation, health behavior practices and physical and mental activities to self-rated health among elderly men and women belonging different social classes, prospectively.

Method

Participants for the study:

A sample of 480 elder men and women who lived in communities and belonged to various social classes (schedule class, schedule tribe, and general open category - non-SC & ST groupings) were selected from the following age categories: 50–59 (N = 160), 60–69 (N = 160), and 70–79 (N = 160). The study employed a multistage random sampling technique to select participants from rural areas in the districts of Chittoor, Kadapa, and Nellore. The sample was taken from subgroups of several socioeconomic classes (scheduled classes, schedule tribe, and general open category groupings), based on age, gender, and education (with or without). The sample consisted of elder men and women from various social classes who reside in communities and can communicate and maintain their cognitive abilities. Three distinct time periods were used to evaluate the sample prospectively (repeatedly): Time-I (1st year), Time-II (2nd year), and Time-III (3rd year). When recruiting new participants for a prospective study such as this, sample attrition due to mortality in the late adult years is a common problem.

Measures used in the Study

An attempt has been made to choose appropriate measures in order to gather relevant data in accordance with the goals. These instruments, which were chosen for the current study, underwent new testing to ensure that they were still relevant. All of the resources were translated into the local language of Telugu and tested on a small group of people. Validity and reliability analyses were performed on every instrument that would be utilized in this investigation. The following are descriptions of the finalized details: a) Personal Data Form (PDF), (b) Life Events Scale (Jamuna and Ramamurti 1999), (c) Spielberger's State-Trait Anger Expression Inventory (Spielberger et al., 1985) (d) Measure of Perception of Social Supports Inventory (Jamuna and Ramamurti 1991) (e) Self-Rated Health (Jamuna, 2014). (f) Measure of Health Behaviour ((Ramamurti, 1996).

Statistical Analysis:

Multivariate statistical techniques were used to analyze prediction of independent variables to dependent variable self-rated health, as per the objectives of the study.

Results and Discussion

The results pertaining to multiple regression analysis are presented in (table-1). An attempt has been made to examine the prediction of personality, stress, self-regulation, social support, health behavior practices, health behavior motivation and physical and mental activity to self-rated health to realize specific objective of the study.

Table 1: MRA of Independent Variables to Dependent Variables Self Rated Health (Subjective) among Elderly Men and Women with Different Social Classes in Time 1

Sl. No	Variables included	R ²	Increase in R ²	F value
1.	Objective Health	.284	.284	187.88*
2.	Health Behavior Motivation	.315	.031	108.66*
3.	Self-Regulation	.333	.018	78.40*
4.	Anger Control	.349	.016	63.022*

5.	Family Supports	.364	.015	53.63*
6.	Anxiety In	.372	.008	46.22*
7.	Health Practices	.380	.008	40.55*
8.	Social Supports	.378	.003	47.35*
9.	Physical and Mental Activity	.386	.008	41.96*
*p<0.01				

The prediction of independent variables to the outcome variable, self-rated health among elderly in table 1 indicates that out of 11 variables 9 variables were significant in regression equation and together accounted for 38.6 percent of variance ($R^2=.386$) in the dependent variable self-rated health among elderly. The variables entered were objective health (objective) with 28.4 percent, health behavior motivation with an additional variance of 3.1 percent, self-regulation with 1.8 percent, anger control with 1.6 percent, family supports with .284 percent, anger in with less than 1 percent, health behavior practices with less than 1 percent (0.8 percent) and physical and mental activity with an additional variance of 0.8 percent to the total variance in self-rated health among elderly men and women. From the results table 1, it can be concluded that objective health is the most significant determinant of self-rated health (subjective) followed by health behavior, motivation, self-regulation, anger control, social supports, anger in, health behavior practices, and physical and mental activity.

Table 2: MRA of Independent Variables to Dependent Variables Self Rated Health (Subjective) among Elderly Men and Women with Different Social Classes in Time 2

S.No.	Variables Included	R ²	Increased in R ²	F
1.	Social Support	.146	.146	81.47*
2.	Anger In	.229	.083	70.67*
3.	Physical and Mental Activity	.266	.037	57.44*
4.	Anger Out	.288	.022	47.95*
5.	State Anger	.295	.007	39.64*
6.	Anger Control	.362	.007	34.11*
*p<0.01				

Results reported in Table 2 on MRA of independent variables to outcome variable among elderly in Time 2 indicate that among independent variables included to predict the outcome variable self-rated health (subjective), a set of independent variables entered in the regression equation were personality, self-regulation, state anger, trait anger, anger control, anger out, anger in, social supports, health behavior practices, health behavior motivation and physical and mental activity. It is noteworthy that out of 11 variables, only 6 variables entered in regression equation with a total contribution of 30.2% in the total variance in the dependent variable, social support contributed 14.6% of variance, anger in with 8.3%, physical and mental activities with 3.7%, anger out with 2.2%, state anger with 0.7% and anger control with additional contribution of 0.7% variance. The aforementioned MRA indicates that the role of social support, anger in and physical and mental activities, state anger and anger control significantly determine one's SRH (subjective) among elderly.

Table 3: MRA of Independent Variables to Dependent Variable Self Rated Health (Subjective) among Elderly Men and Women from Different Social Classes in Time 3

S.No.	Variables Included	R ²	Increased in R ²	F
1.	Social supports	.150	.150	81.379*
2.	State – anger	.202	.051	60.165*
3.	Self-regulation behaviour	.221	.019	44.896*
*p<0.01				

Table 3 provides the contribution of independent variables to outcome variable self-rated health (subjective) among elderly men and women from different social classes in Time 3. A set of variables entered in the regression equation were personality (trait anger, state anger, anger control, anger out, and anger in), self-regulation behavior, stress, social supports, health behavior-practices, health behavior-motivation and physical and mental activity. It is noteworthy that out of 11 variables, only three variables entered the regression equation with a total contribution of 22.1% of variance in the dependent variable self-rated health. Of which the variable social supports contributed 15% of variance, state anger (personality) with an additional contribution of 5.1% and self-regulation behavior with an additional contribution of 1.9% entered the equation.

as the last variable to dependent

variable, self-rated health. The aforementioned MRA indicates that the self-rated health is determined significantly by social supports, state anger and self-regulation among elderly men and women from different social classes.

The MRA results highlighted that objective health, motivation to keep health & fitness, self-regulation behavior, control of anger & anxiety, good health practices, family supports, social supports were found to be determinants of SRH in the elderly men and women. It is obvious that objective health consumes a major chunk of variance, good motivation, regulation of one's health habits and certainly determine one's perception towards health.

Similarly, the same elderly men and women, in Time 2, when they advance in age i.e., in Time 2, social supports, anger in, physical and mental activity, state anger, anger control were found to be significant predictors of self-rated health. These results also suggest that the social supports do influence perception of health followed by anger control, physical & mental activity of an individual do play a significant role in determining one's perception towards health i.e., one's self perception of health.

In Time 3, only social supports, state anger, self-regulation behavior was seemed to be significant predictors among many psychological variables. To conclude, the variables such as social supports, state anger and self-regulation behavior with advancing age were found to be critical in determining the self-perception of health. It is reported that objective health, personality, self-regulation, social supports, health behavior-practices, health behavior-motivation, physical and mental activity significantly determine self-rated health (subjective). The question of how to help older people have a good attitude toward their health has been debated for decades. Self-rated health may be impacted by a number of things. These variables may be individual or personal in nature. Two key measures of senior health are functional status and self-rated health. They are frequently used markers to determine healthy life expectancy or disability-free life expectancy, and they are also significant components of quality of life. Self-rated health is a measure of well-being that expresses how an individual feels about their own health (Hoeymans et al. 1997).

According to Hays et al. (1996), there is a correlation between lower self-rated health and depressive symptomatology, poor functional status, comorbidity, and certain socioeconomic characteristics in older adults. Among various age groups, self-rated health was a significant factor linked to muscle strength. According to reports, having poor self-rated health can make one more dependent on others for everyday tasks and lower one's quality of life (Ebly et al., 1996). Numerous research have assessed the elderly Japanese population's self-rated health (Ai and Hoshi 2005). Fewer people, mainly in the middle age range, have studied younger generations. These tendencies are supported by the current study's findings. Clarifying the health-related elements that may have an impact on self-rated health based on age is crucial for maintaining and improving the self-rated health of community members. This leads to the establishment of public health initiatives tailored to the specific age groups.

The capacity of older persons to adjust to and make up for their limitations is correlated with their overall health. They have spoken about their health experience in terms of security, togetherness, autonomy, and peace of mind. Self-rated health has proven to be a more accurate predictor of future health and survival than a doctor's evaluation in a number of long-term studies. Self-rated health also has a strong correlation with general hospital treatment, home health care for the elderly, and doctor visits for individuals 65 years of age or older. Elderly people's subjective well-being is most closely correlated with their perceived health, which is highly impacted by their objective health evaluations (Mitrushina & Satz, 1991).

José (2010) revealed that a wide range of factors, including genetic markers, stressors, health practices, and chronic disease states, influence SRH. According to Joana, Angerika, and Penka (2015), SRH is directly impacted by social factors such as education, financial resources, and monthly income. These social elements also have an impact on the links between SRH and behavioral components and psychological stress. According to Borg and Cristensen (2000), the fraction of SRH decline increases with decreasing social status, a finding that is at odds with the current study. The study's conclusions concur with those of a few other investigations that were conducted. Many research revealed that there is a socioeconomic gradient in SRH and that SRH varies with time.

Factors related to work environment and lifestyle maintained the statistical significance of the relationships between SRH and social class. Anatharaman (1981) found that social participation activities and personal attitudes were strong predictors of SRH in older adults. These findings are consistent with the current study. Personality traits and self-perceived health are consistently predicted. Research indicates that negative traits in personality, such as hostility (angry within and out), are associated with risky behaviors that are predicted by perceptions of one's health. The results of this investigation showed a correlation with the previous study. Additionally, it was discovered that SRH significantly predicted social supports. According to Mossey and Shapiro (1982), self-regulation may help people see health positively. It has been documented that healthy habits, exercise, and mental stimulation have a good impact on older adults' self-rated health. According to Loeb (2004), encouraging self-motivation may improve older men's views of their health and general well-being.

Conclusion

Finding of the present suggests that these three variables viz., social supports, state anger and self-regulation behavior are to be manipulated in health intervention strategies to inculcate positive perception towards health and overcome apprehension of negative thoughts towards health. Since SRH seems to be a critical factor in health and has survival value the outcome of the study would certainly provide certain inputs to promote healthy and active aging. Thus, SRH can serve as a global measure of health status not only in elderly population but also in younger population.

Declaration of competing interest

The author declares that there is no conflict of interest.

Acknowledgements

The authors wish to acknowledge all study participants.

References:

1. Af Sillsn, U., Nilsson J.A., Mansson, N.O., & Nilsson, P.M. (2005). Self-rated health in relation to age and gender: Influence on mortality risk in the Malmo Preventive Project. *Scandinavian Journal of Public Health*, 33, 183–89.
2. *Aging*, 3, 73-77
3. Ai, B. & Hoshi, T. (2005) A study on the availability of subjective health indices for the aged: focus on Japanese and Chinese studies. *Nippon Koshu Eisei Zasshi*, 52, 841-852. (in Japanese with English abstract).
4. Anantharaman, R.N. (1981). Physical health and adjustment in old age.
5. Benyamini, Y. & Idler, E.L. (1999). Community studies reporting association between self-rated health and mortality: Additional studies, 1995 - 1998. *Research on Aging*, 21(4), 392-401.
6. Bohm, A.W., Mielkea, G.I. & da, Cruz, M.F., Ramirez, V.V., Wehrmesister,
7. Bosewirth, H.B. & Schaie, K.W. (1997). The relationship of social environment, social networks and health outcomes in the Seattle Longitudinal Study: Two analytical approaches. *Journal of Gerontology: Series B, Psychological Sciences and social Sciences*, 52(5), 197-205.
8. Leersnyder, Jozefien & Kim, Heejung & Mesquita, Batja. (2015). Feeling right is feeling good: Psychological well-being and emotional fit with culture in autonomy- versus relatedness-promoting situations.. *Frontiers in Psychology*. 6. 1-12. 10.3389/fpsyg.2015.00630. Jamuna, D. & Ramamurti, P.V. (1991). Social Supports Inventory for the elderly. *Journal of Psychological Researches*, 35, 133 - 136.
9. Ebly, E.M., Hogan, D.B. & Fung, T.S. (1996) Correlates of self-rated health in persons aged 85 and over: results from the Canadian Study of Health and Aging. *Canadian Journal of Public Health*, 87, 28-31.
10. F.C. (2015). Social support and leisure-time physical activity among the elderly: A population-based study. *Journal of Physical Activity Health*, 13(6):599-605.
11. Hays, J.C., Schoenfeld, D.E. & Blazer, D.G., (1996) Determinants of poor self-rated health in late life. *American Journal of Geriatric Psychiatry*, 4, 188-196.
12. Hoeymans, N., Feskens, E.J., van den Bos, G.A., & Kromhout, D. (1997) Age, time, and cohort effects on functional status and self-rated health in elderly men. *American Journal of Public Health*, 87, 1620-1625.
13. Idler, E.L. & Kasi, S. (1995). Self-ratings of health: Do they also predict change in functional ability? *Journal of Gerontology: Social Sciences*, 50B, S344 - S353.
14. Jamuna, D. & Ramamurti, P.V. (1991). Social Supports Inventory for the elderly. *Journal of Psychological Researches*, 35, 133 - 136.
15. Joana Simeonova., Angelika Velkova & Penka Kostadinova (2015). Social characteristics and their effect on self-rated health in persons over 18 years of age. *Scripta Scientifica Salutis Publicae*, 1(1), 15-20.
16. L. Borg, Jytte Molin Christensen, Jesper Kristiansen, Niels Henrik Nielsen, Torkil , Menné & Lars K. Poulsen (2000). *Archives of Dermatological Research* volume 292, pages 285–291.
17. Loeb, S.J. (2004). Older men's health: motivation, self-ratings, and behaviors.
18. Maddox, G.L. & Douglass, E.B. (1973). Self-assessment of health: A longitudinal study of elderly subjects. *Journal of Health and Social Behaviour*, 14, 87- 93.
19. Markides, K.S., Lee, D.J., & Ray, L.A. (1993). Physicians' ratings of health in middle and old age: a cautionary note. *Journal of Gerontology*, 48, 24-27.
20. McDonough, P., & Walters, V. (2001). Gender and health: Reassessing patterns and explanations. *Social Science & Medicine*, 52, 547-559.
21. Mitrushina MN, Satz P. (1991). Correlates of self-rated health in the elderly. *Nursing Research*, 53(3), 198-206.
22. Mossey, J.M. & Shapiro, E. (1982). Self-rated health: A predictor of mortality among the elderly. *American Journal of Public Health*, 72, 800 - 808.
23. Spielberger, C., Johnson, E.H., Russell, S.F., Crane, R.J., Jacobs, GA. & Worden, T.J. (1985). The

- experience and expression of anger: Construction and validation of an anger expression scale. In M. Chesney & R. Rosenman (Eds.) *Anger, hostility in cardiovascular and behavioural disorders*, (5 - 30). Newyork: McGraw-Hill.
24. Wong, M., Yu, R. & Woo, J. (2017). Effects of Perceived Neighbourhood Environments on Self-Rated Health among Community-Dwelling Older Chinese. *International Journal of Environmental Research Public Health*, 14(6), 614.