Self-Rated Health, Objective Health, Life Satisfaction, and Psychological Wellbeing among Middle Adulthood and Late Adulthood Elderly across Different Social Classes: Insights from a Three-Year Perspective Study.

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Abstract

The majority of elderly experience heightened health-related concerns and disability apprehensions, particularly after entering their sixty plus. Self-rated health (SRH) has emerged as a significant psychological indicator of longevity. Health-related self-perception, acting as a moderating variable, strongly influences physical wellbeing, which subsequently contributes to mental wellbeing. In this context, data on self-rated health, objective health, life satisfaction and psychological wellbeing were drawn from a 3-year prospective study involving three cohort groups (ages 50-59, 60-69, and 70-79). Study was conducted on 480 middle aged and elderly men and women across three consecutive years. No significant differences in age groups, gender groups, and education levels were observed across the three consecutive years with regard to Self-Rated Health, except at Time 1, where a significant difference was found between men and women. Study also revealed significant association between self-rated health, objective health and significant association between life satisfaction and psychological wellbeing. Findings were discussed and implications were drawn.

Keywords: Middle and Late Adulthood, Self-Rated Health, Objective Health, Physical Wellbeing, psychological Wellbeing, Life Satisfaction, Prospective Study, and Cohort Groups.

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Introduction

One of the indicators of longevity, as highlighted in studies on ligneous individuals, is self-rated health (SRH). This self-assessment of health is a significant psychological factor in evaluating the health status of elderly individuals. In numerous studies, self-rated health (SRH) is also referred to as self-assessment of health (SAH) or self-perceived health. Researchers have found SAH particularly intriguing, as it serves as a crucial predictor of various future health outcomes, including mortality (Benyami & Idler, 1999; Idler, 1992). Personal factors such as age, gender, marital status, education, and social status significantly contribute to the variance in SRH. Poor self-rated health is more frequently observed among elderly women compared to men and is particularly prevalent among Muslims, Scheduled Castes, and women living in rural areas. These findings indicate a pressing need for gender-sensitive health interventions (Lucky Singh, Perianayagam, Prashant, and Rajesh 2013).

Self-rated health (SRH) has become an essential metric in gerontological research, reflecting how individuals subjectively evaluate their overall health. Unlike clinical health assessments based on objective criteria, SRH gauges an individual's perception of their physical, mental, and social well-being, providing crucial insights into their quality of life, functional status, and possible future health outcomes (Jylhä, 2022). For older adults, understanding SRH is particularly significant, as it often serves as a predictor of morbidity, mortality, and healthcare use, regardless of actual clinical conditions (Zajacova & Woo, 2021). Gender plays a significant role in influencing SRH among the elderly. Research consistently reveals that elderly women report worse SRH compared to men, despite often living longer. This difference is partly due to variations in chronic disease prevalence and disability rates, with women more frequently affected by non-life-threatening yet debilitating conditions such as arthritis, osteoporosis, and depression (Pinquart & Sörensen, 2022). These conditions contribute to a decreased sense of well-being and functional capacity, resulting in lower SRH (Miller et al., 2023).

In contrast, elderly men generally report better SRH, though they face higher risks of life-threatening conditions like cardiovascular disease. The more positive SRH among men may be influenced by societal norms that discourage them from reporting health issues and emphasize resilience (Cornwell et al., 2021). Additionally, men may interpret health differently, focusing on functional capacity rather than symptoms or chronic conditions, which could result in higher SRH ratings (Jürges, 2023). These gender differences highlight the complex interaction of biological, psychological, and social factors in determining SRH among older individuals. SRH also shows notable variation across different age groups within the elderly population. Research shows a general decline in SRH with increasing age, especially among those aged 75 and older (Lee et al., 2023). This decline is often associated with the onset of multiple chronic conditions, reduced physical and cognitive function, and growing frailty. Individuals aged 60-74, however, tend to rate their health more positively, largely because many retain functional independence and participate in social and recreational activities (Tomassini et al., 2022). Nonetheless, the decline in SRH with advancing age is not uniform; it is influenced by factors such as social support, resilience, and access to healthcare.

Psychosocial factors are vital in shaping how age affects Self-Rated Health (SRH). For instance, older adults who have robust social networks, a clear sense of purpose, and effective coping strategies are more likely to report positive SRH, even when facing similar levels of physical decline as their peers (Glymour & Mujahid, 2023). This underscores the importance of integrating both biological aging and social context when evaluating SRH in elderly populations. Socioeconomic status (SES) is another crucial determinant of SRH among older adults. Research consistently shows that those from higher social classes tend to report better SRH compared to their lower-class counterparts (Read et al., 2022). This difference is largely due to variations in access to resources, healthcare, and living conditions. Higher SES is linked with better education, healthier lifestyles, and increased access to preventive healthcare services, all contributing to more favorable health perceptions (Schmitz et al., 2023).

Conversely, elderly individuals from lower socioeconomic backgrounds are more likely to face numerous health challenges, such as higher rates of chronic conditions, poor nutrition, and restricted access to healthcare (Graham & Nazroo, 2022). These challenges, along with heightened stress and adverse living conditions, lead to poorer SRH in this group. Moreover, educational attainment—an integral part of SES—affects health literacy and the

ability to manage chronic conditions, further deepening the gap in SRH across different social classes (Chen et al., 2023). The interplay of gender, age, and social class adds complexity to SRH among the elderly. For example, older women from lower socioeconomic backgrounds are especially prone to poor SRH due to the combined effects of gender-based health disparities, economic disadvantage, and age-related decline (Glymour & Mujahid, 2023). In contrast, elderly men from higher social classes may report better SRH even with chronic conditions, illustrating how privilege and social status can mitigate negative health perceptions (Cornwell et al., 2021). Recognizing these intersections is essential for creating targeted interventions to enhance SRH and promote health equity among diverse elderly populations.

Self-rated health (SRH) and objective health are intricately connected, with individuals' self-assessments often reflecting their general health status and functioning. Studies reveal that SRH effectively serves as an indicator for objective health measures, such as the presence of chronic conditions and functional limitations (Idler & Benyamini, 1997). The correlation between these subjective assessments and objective health markers emphasizes SRH's role in capturing health aspects that might not be fully addressed by clinical evaluations alone (Gorman & Braverman, 2008). As people age, the significance of SRH in relation to objective health becomes even more pronounced, since older adults' declining physical abilities are often mirrored in their self-perceived health (Jylhä, 2009).

Life satisfaction and psychological well-being are crucial elements of an individual's quality of life, especially in middle-aged and older adults. Life satisfaction, which reflects overall contentment with one's life, is strongly associated with psychological well-being (Diener et al., 2003). High levels of life satisfaction are linked to positive psychological outcomes, such as reduced depression and anxiety, and enhanced overall well-being (Ryff & Singer, 2006). This relationship underscores the importance of life satisfaction as a significant predictor of psychological health and highlights its role in understanding the broader dimensions of well-being in later life.

In middle-aged and older adults, the interaction between SRH, life satisfaction, and psychological well-being is vital for addressing health and quality of life. Evidence indicates that better SRH and higher life satisfaction can lead to improved psychological well-being, which in turn contributes to better overall health outcomes (Blazer, 2002). Conversely, poor SRH and low life satisfaction are often associated with poorer psychological health and a higher risk of mental health problems (Westerhof & Keyes, 2009). Exploring these relationships provides important insights into how both subjective and objective health measures impact well-being in later life, guiding both clinical practices and public health strategies.

The introduction discusses the significance of self-rated health (SRH) as a key psychological factor in assessing the health of elderly individuals. SRH, also known as self-assessment of health (SAH) or self-perceived health, serves as a crucial predictor of various health outcomes, including mortality. Studies highlight that SRH can be influenced by personal factors such as age, gender, marital status, education, and social status. For instance, elderly women often report poorer SRH compared to men, which is linked to higher prevalence of chronic conditions among women. Gender differences in SRH may stem from societal norms and variations in health reporting. Age also affects SRH, with older individuals generally reporting worse health, particularly those aged 75 and above. Psychosocial factors like social support and sense of purpose can positively influence SRH, even amidst physical decline. Socioeconomic status (SES) is another critical determinant, with those from higher SES reporting better SRH due to better access to resources and healthcare. Conversely, lower SES is associated with poorer SRH due to higher health challenges and limited access to care. The interplay of gender, age, and social class further complicates SRH among the elderly. Additionally, SRH correlates with objective health measures and reflects overall health status. Life satisfaction and psychological well-being are closely linked to SRH, influencing overall health outcomes and highlighting the importance of addressing both subjective and objective health measures in later life.

Review of Literature:
Self-rated health (SRH) is a widely utilized measure that captures an individual's subjective assessment of their overall health and well-being. This metric is particularly insightful when examining various demographic and

socioeconomic factors that influence health perceptions among different populations. The following review of literature explores SRH across distinct age groups, gender, and social classes, shedding light on how these variables impact self-reported health status. It also examines the association between SRH and objective health indicators, revealing the interplay between subjective and objective measures of health. Additionally, the review considers the relationship between life satisfaction, psychological well-being, and SRH among middle-aged and elderly adults, emphasizing the complex dynamics that contribute to overall health perceptions. By integrating these perspectives, the review aims to provide a comprehensive understanding of how SRH reflects and intersects with various dimensions of health and well-being in diverse populations.

Self-rated health (SRH) serves as a vital measure of overall health, predicting morbidity, mortality, and healthcare utilization in elderly populations. It reflects an individual's subjective assessment of their health, incorporating both physical and mental health perceptions. Numerous studies have explored SRH among various age groups, genders, and social classes within older populations. Research highlights a significant impact of gender on SRH among older adults, with elderly women generally reporting poorer SRH compared to men, despite having longer life expectancies. This paradox may arise from disparities in chronic disease prevalence, disability rates, and social roles (Pinquart & Sörensen, 2022). Women are more likely to experience chronic conditions like arthritis and osteoporosis, which, while not life-threatening, significantly impair daily functioning and perceived health (Miller et al., 2023). Additionally, women may be more attuned to their health, leading them to report more symptoms and, consequently, lower SRH (Jürges, 2023).

Conversely, elderly men, who are more susceptible to life-threatening conditions such as heart disease, often rate their health more favorably. This difference can be partly attributed to societal norms that encourage men to downplay health issues and emphasize physical strength (Cornwell et al., 2021). Thus, SRH among elderly men and women is influenced by both biological factors and deeply ingrained gender norms. SRH also shows significant variation across different age groups within elderly populations. Studies indicate that SRH typically declines with advancing age, particularly after 75, due to increasing chronic diseases, frailty, and functional impairments (Zajacova & Woo, 2021). For instance, individuals aged 60-74 frequently report better SRH than those aged 75 and above, who face a sharper decline in physical and cognitive health (Lee et al., 2023). Maintaining independence in daily activities is a key factor influencing SRH in these age groups, with older adults who retain autonomy tending to rate their health more positively. Furthermore, psychological factors such as resilience and social support can help mitigate the decline in SRH with age. Elderly individuals with strong social networks and effective coping mechanisms are more likely to report better health, even when facing similar physical challenges as their peers (Tomassini et al., 2022). Thus, age-related differences in SRH are complex, involving both physical and psychosocial aspects.

Socioeconomic status (SES) is another crucial determinant of SRH among older adults. Elderly individuals from higher social classes generally report better health than those from lower classes, reflecting disparities in access to resources, healthcare, and living conditions (Glymour & Mujahid, 2023). Higher SES is associated with healthier lifestyles, better nutrition, and improved access to preventive healthcare, all contributing to better SRH. In contrast, lower SES often correlates with higher stress, limited healthcare access, and exposure to adverse environments, resulting in poorer SRH (Read et al., 2022). Educational attainment, a key component of SES, also significantly influences SRH. Elderly individuals with higher education levels typically have better health literacy, allowing them to manage chronic conditions more effectively and make informed health decisions (Schmitz et al., 2023). Therefore, SRH disparities across social classes underscore broader health inequalities driven by social determinants.

The interplay of gender, age, and social class adds further complexity to SRH patterns. For instance, older women from lower social classes often face worse SRH due to the compounded effects of gender inequities, economic disadvantages, and aging (Graham & Nazroo, 2022). Similarly, elderly men from higher social classes may rate their health more positively despite underlying health conditions, highlighting the influence of privilege on self-perception (Chen et al., 2023). Recognizing these intersections is essential for developing targeted interventions to enhance health equity among older adults. The literature on SRH among elderly populations emphasizes the

need to consider gender, age, and social class when evaluating health perceptions. While elderly women typically report poorer SRH than men, there are notable differences across age groups and socioeconomic backgrounds. Future research should explore the intersectionality of these factors to create more nuanced strategies for improving SRH in diverse elderly populations.

Zautra and Hempel (2023) conducted a narrative literature review to explore the link between subjective well-being (SWB) and physical health. Their review indicated a generally positive relationship between the two, but noted that this connection varied based on the measurement methods used. In particular, subjective self-reports of health showed stronger correlations with SWB than objective health indicators. The authors emphasized the need for research that directly addresses the psychological effects of health changes and called for more studies to resolve methodological inconsistencies and biases associated with self-report measures.

Das et al. (2020) offered a detailed review examining the factors and theoretical frameworks that influence SWB. Their findings revealed that SWB is shaped by a variety of elements, including personal aspirations, needs, emotions, and individual personality traits. The review highlighted the complexity of aligning psychological theories with public health perspectives. Das et al. (2020) recommended a multidisciplinary approach to bridge the gap between theoretical concepts and empirical research, aiming to create more comprehensive frameworks for understanding SWB determinants.

McKenzie and Campbell (2023) concentrated on older adults and explored the relationships between subjective health evaluations and objective health metrics with life satisfaction and psychological well-being. Their study found that subjective health assessments, which were affected by factors like socio-economic status, emotional support, and personal health beliefs, often correlated more strongly with life satisfaction than objective health measures. The authors suggested that future research should aim to develop integrated models that consider both subjective perceptions and objective health data to gain a better understanding of health and well-being dynamics in older populations.

To this end, an effort has been made to examine mean trends in self-rated health across Time 1, Time 2, and Time 3 among elderly men and women, different age groups, and social classes. Additionally, the study investigates the association between self-rated health (subjective) and objective health status, as well as the relationship between life satisfaction and psychological well-being among elderly men and women from various social classes across Time 1, Time 2, and Time 3.

Objectives of the study

1. To carry out a prospective assessment of self-rated health in a sample of community dwelling elderly men and women and different age groups from different social classes

2. To examine the relationship between self-rated health (subjective) and objective health status of the elderly men and women from different social classes, prospectively.

3. To study the relationship between life satisfaction and psychological wellbeing of elderly men and women from different social classes, prospectively.

Method
Sample
- A sample of 480 community dwelling elderly men and women of rural and urban areas of Rayalaseema (Chittoor, and Kadapa) region of Andhra Pradesh from the age groups of 50-59,60-69, and 70-79 years were drawn by using a multi-stage random sampling technique. The sample were tested periodically in time-1(first year) time -2(2nd year) and time-3(3rd year). The entire sample of elderly men and women of different social classes was screened for their cognitive and communication capability. Elderly with poor cognitive, communication skills and sickness were excluded from the sample. In addition, those who were not willing to participate in the study were dropped in the sample.The subjects were identified, contacted and rapport was established by explaining the significance

of the study. The testing sessions were carried out in a quiet and calm place and with some privacy. Testing appointments were fixed according to mutual convenience.

Testing was carried out with an initial interview to record their personal data details. In this session, self-rated health and other measures were administered. The second session of testing consisted of the physical examination by the physician in a convenient place one after another. The physicians rating of the older persons was obtained.

- **Tools Used**
- Personal Data Form (PDF) was used to seek information on relevant sociodemographic characteristics
- Self-rated health was assessed through a standardized scale suitable for the Indian aged (Jamuna & Ramamurti, 1990).
- Objective health status was assessed through general physical examination of the person (Physician rating).
- Life satisfaction scale (Jamuna & Ramamurti, 1990) was also used to assess life satisfaction of the subjects.
- Life event scale ((Jamuna & Ramamurti, 1990) was used to assess psychological wellbeing of the subjects
- **RESULTS AND DISCUSSION**

In view of the objectives of study, an attempt is made in this chapter to present the data obtained from the input variables and outcome variable, self-rated health. The data as obtained as per the objectives formulated were subjected to various types of statistical analyses.

The subgroup trends were observed in self-rated health (subjective) among 480 sample of male and female elderly belong to different social classes (OC & SC, ST) in Time1, Time 2 and Time 3, prospectively. The trends obtained are presented and discussed under the following subheadings.

Section I: **Sample Characteristics of Elderly Men and Women from Different Social Classes**

For purposes of parsimony, in this study the sample from different social classes was divided into subgroups with an aim to study the characteristics of elderly. As a first step of analysis, the sociodemographic characteristics of elderly from different social classes are compiled and presented in Table 1.

Table-1: Sociodemographic Characteristics of Elderly Men and Women

S.No.	Subgroups	N	Percentage
1.	**Age**		
	a. 50 – 59	160	33.3
	b. 60 – 69	160	33.3
	c. 70 – 79	160	33.3
2.	**Gender**		
	a. Male	240	50
	b. Female	240	50
3.	**Social class (Category)**		
	a. OC	240	50
	b. SC & ST	240	50
4.	**Education**		
	a. Illiterate	317	66
	b. Primary	103	21.5
	c. High School	60	12.5
5.	**Income Source**		
	a. Salary	11	2.1
	b. Pension	333	69.4

	c. Property	10	2.1	
	d. Family help	34	7.3	
	e. Others	92	19.2	
6.	**Marital Status**			
	a. Married	298	62.1	
	b. Widow	127	26.4	
	c. Married but Single	55	11.5	
7.	**Living Conditions**			
	a. Family	408	85	
	b. Old age home	36	7.5	
	c. Alone	12	2.5	
	d. Relatives	7	1.5	
	e. Grand children	17	3.5	

From the above Table 1, it is clear that older adults were equally distributed across 50-59, 60-69 and 70-79 age groups (each age group 33.3%). The distribution of the sample interms of gender is equal (male 50% and female 50%). The distribution of the social class category indicates that 50% were from open category and 50% were from SC & ST category. The details on educational status of elderly shows that 66% were uneducated, 21.5% studied upto primary education and 12.5% studied upto high school education. In terms of income source, 2.1% of elderly were salaried, 69.4% were pensioners, 2.1% of elderly have income source of property, 7.3% of elderly have source of income of family help, and 19.2% of elderly had other income sources. The details on marital status indicate that 62% of elderly were married, 26.4% of elderly were widowed and 11.5% of elderly were married but living alone. Living conditions of elderly shows that 85% of elderly were living with family members. 7.5% of elderly were living in old age homes (wife / Husband). 2.5% of elderly were living alone, 1.5% of elderly were living with relatives and 3.5% of elderly living with grandchildren. Overall observation suggests that age, gender, and social class were equally distributed. Majority of elderly were illiterates, pensioners, married and living with family members.

Section II: **Examination of Mean trends in self-rated health across Time 1, Time 2 & Time 3 in Elderly Men and Women**

To realize of one of objectives of the study, analysis has been carried out to examine the mean trends in SRH (subjective) and relationship between SRH (subjective) and objective in health different age, gender and social classes across Time 1, Time 2 and Time 3 prospectively by using t-tests and correlation technique.
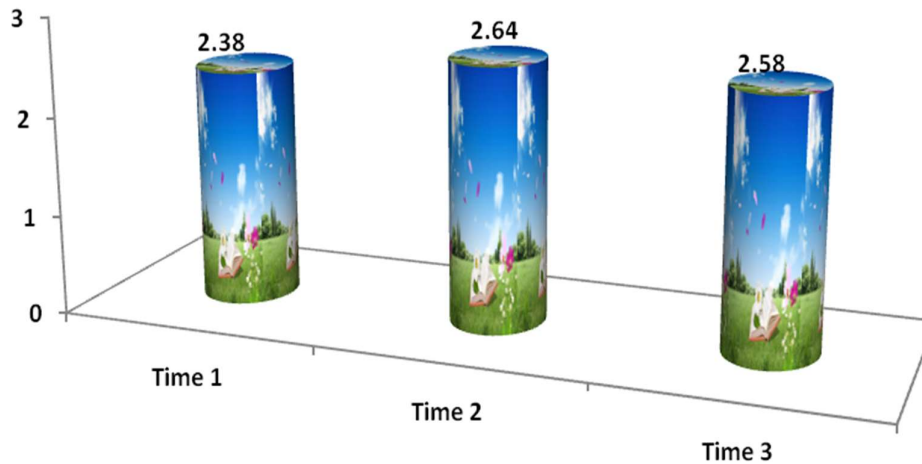
Table 2: **Self-Rated Health (subjective) in Time 1, Time 2 and Time 3 of Elderly Men and Women**

S.No.	Dependent Variables	Mean(SD)	t value
1. Time 1	a. SRH	2.38(.698)	6.445* (a – b)
2. Time 2	b. SRH	2.64(.597)	1.766@ (b – c)
3. Time 3	c. SRH	2.58(.667)	4.747** (a – c)

SRH=Self Rated Health

*p<0.05; **P<0.01

Figure -1: **Self-Rated Health in Time 1, Time 2 and Time 3 Among Elderly Men and Women**

Mean tends of Self Rated Health (Subjective) of community dwelling elderly belonging to different social classes (Table 2). Trends indicate that the Self Rated Health in Time 1 and Time 2 differed significantly (t = 6.44*). Self-rated health in Time 1 and Time 3 differed significantly (t = 4.74*). But no significant difference was found between SRH in Time 2 and SRH Time 3. However, the comparison of mean trends on SRH shows that elder people's perception towards their health has increased across Time 2 and Time 3 indicating positive perception of SRH.

For purposes of clarity, results on SRH were presented across age, gender and social classes as separate analysis in Time 1, Time 2 and Time 3.

For the 1st wave of testing, a sample of 480 elderly men and women belonging to different social classes (OC, SC & ST) were identified, tested, and examined across socio-demographic subgroups viz., age, gender, and social class by using simple 't' – tests.

Table-4: **Self Rated Health (Subjective) in Time 1 Across Socio-demographic Subgroups viz., Age, Gender and Social Classes**

S.No.	Subgroup	N	Mean(SD)	t value
1.	**Age**			
	a. 50 – 59	160	2.45(.708)	1.159$^{@}$ (a – c)
	b. 60 – 69	160	2.40(.675)	0.647$^{@}$ (b – c)
	c. 70 – 79	160	2.31(.769)	1.74$^{@}$ (a – b)
2.	**Gender**			
	a. Male	240	2.32(.727)	1.97*(a – b)
	b. Female	240	2.45(.707)	
3.	**Social Class (Category)**			.698$^{@}$ (a – b)

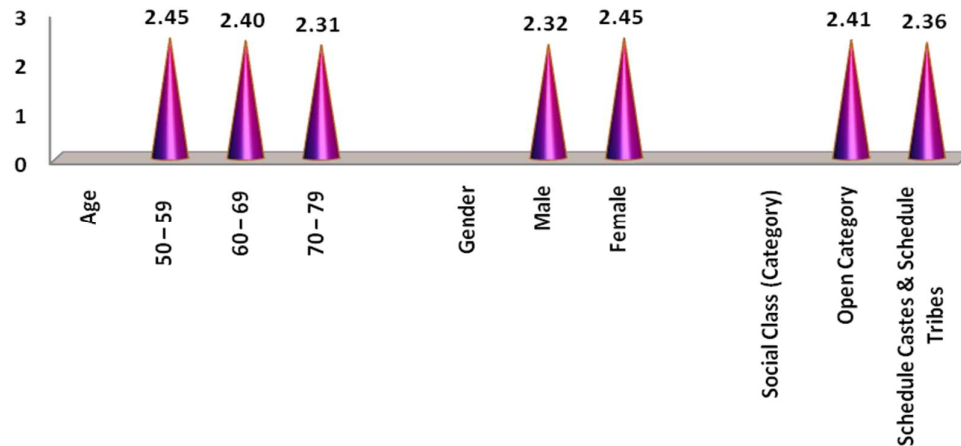|				
	a. Open Category	240	2.41(.732)	
	b. Schedule Castes & Schedule Tribes	240	2.36 (.707)	
*p<0.05; **P<0.01 @ = Not Significant				

Figure-2: **Self Rated Health (Subjective) in Time 1 Across Socio-demographic Subgroups viz., Age, Gender and Social Classes**

When we examine the mean trends of self-rated health (subjective) of community dwelling elderly (Table 4) in Time 1 alone, it indicates that the mean differences were not statistically significant in terms of age. The mean differences were significant with regard to gender in elderly. Also, there were no significant differences with regard to social class category (OC, SC & ST). However, the mean trends show, subjects in 50–59, female elderly and elderly from open category reported better self-rated health compared to their other counter parts in the study. Figure 2 illustrates the mean trends of self-rated health (subjective) in Time 1.

For the 2nd wave of testing same sample of 480 elderly who were identified at Time 1 the (first year) were tested again in 2rd year to observe the mean trends prospectively. Those who have dropped from the study n Time 1 were substituted with the fresh sample.

Table 5: **Self Rated Health (Subjective) in Time 2 Across Different Sociodemographic Subgroups viz., Age, Gender and Social Classes**

S.No.	Subgroup	N	Mean(SD)	t value
1.	**Age**			
	a. 50 – 59	160	2.81(.848)	.144[@] (a – b)
	b. 60 – 69	160	2.90(.734)	.219[@] (b – c)
	c. 70 – 79	160	2.78(.708)	.339[@] (a – c)
2.	**Gender**			
	a. Male	240	2.32(.727)	1.97[@] (a – b)
	b. Female	240	2.45(.707)	

3.	**Social class**			
	a.Open Category	240	2.77(.777)	$0.748^{@}(a-b)$
	b.Schedule Castes & Schedule Tribes	240	2.83(.810)	
*p<0.05; **P<0.01 @ = Not Significant				

Figure-3: **Self Rated Health (Subjective) in Time 2 Across Different Sociodemographic Subgroups viz., Age, Gender and Social Class**
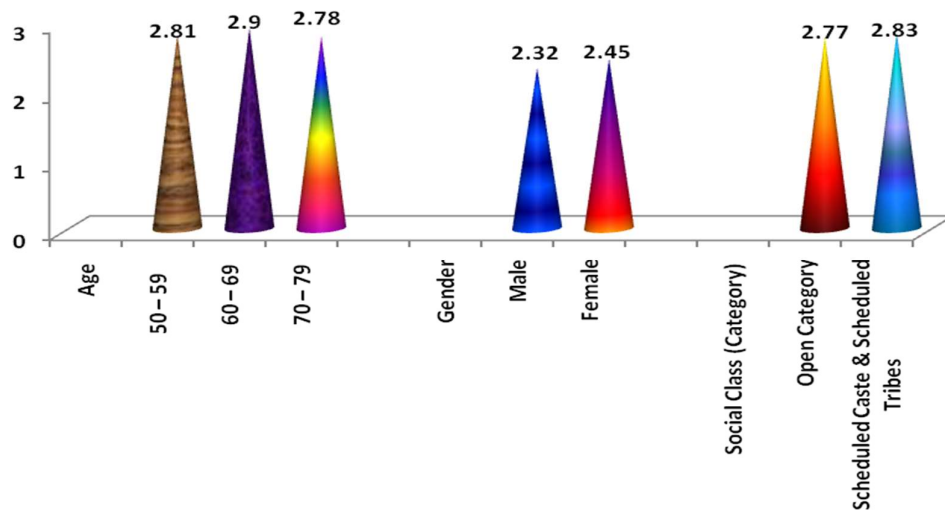
Mean trends of self-rated health of community dwelling elderly (Table 5) in Time 2 shows that the mean differences were not statistically significant with regard to age, gender and social class subgroups of elderly. However, mean trends indicate that elderly in 50- 59 age group female elderly and elderly belonging to scheduled tribes and scheduled castes reported better self-rated health (subjective) compared to their other counterparts tested in the study 2nd wave of the study. Figure 3 illustrates the mean trends of SRH in age, gender and social classes.

To observe the mean trends prospectively, 3rd wave of testing was carried out and tested again in 3rd year on the same sample of 480 elderly who were identified and tested in the 1st year and 2nd year. Those who have dropped (sample attrition) in the 2nd year sample were again substituted with a fresh sample of subjects.

Table 6: **Self Rated Health (Subjective) in Time 3 Across Different Socio-demographic Subgroups viz., Age, Gender and Social Classes**

S.No.	Subgroup	N	Mean (SD)	t value
1.	**Age**			
	a. 50 – 59	160	2.43(.790)	$0.38^{@}$ (a – b)
	b. 60 – 69	160	2.40(.665)	$0.00^{@}$ (b – c)
	c. 70 – 79	160	2.40(.626)	$0.383^{@}$ (a –c)
2.	**Gender**			

	a. Male	240	2.43(.675)	0.72@(a – b)
	b. Female	240	2.39(.717)	
3.	**Social Class**			
	a.Open Category	240	2.42(.679)	0.196@(a – b)
	b.Schedule Castes & Schedule Tribes	240	2.40(.714)	
*p<0.05; **P<0.01 @ = Not Significant				

Figure-4: **Self Rated Health (Subjective) in Time 3 Across Different Sociodemographic Subgroups viz., Age, Gender and Social Classes.**
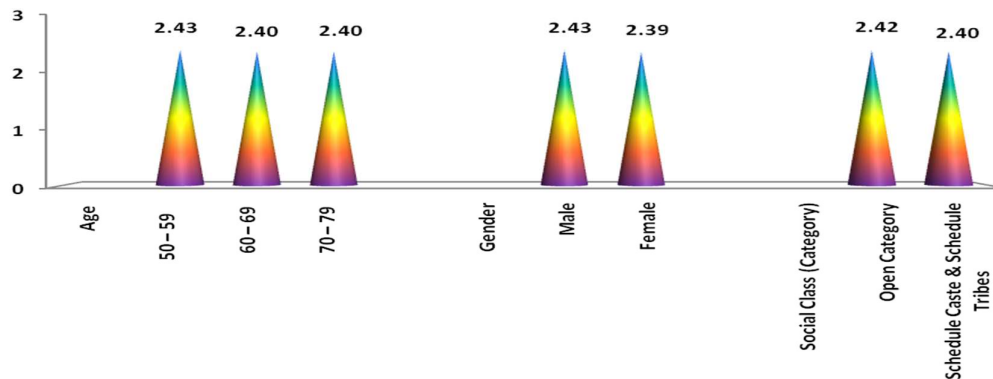
Mean trends of self-rated health of elderly (table 6) implies that mean differences were not statistically significant in sociodemographic subgroups of age, gender and social classes. Nevertheless, mean trends shows that subjects in 50–59, male elderly, and elderly from open category reported better subjective self-rated health compared to their other counterparts tested in the 3rd wave. Figurative representation of self-rated health in 3rd wave is int Figure 4. In addition to the mean trends in self-rated health in time I to time III in gender and age groups, an attempt has been made to examine the relationship between self-rated health, objective health, and psychological wellbeing.

Section III: **Examination of Association of self-rated health (Subjective) and objective health status among elderly men and women from different social classes in Time 1, Time 2 and Time3.**

To realize one of the objectives of study, an attempt was made in this study to examine the association between SRH (Subjective) and objective health as assessed by a physician across time 1, time 2 and time 3. The results were presented in Table 3.

Table 3: **Relationship Between SRH (Subjective) and Objective Health in Time 1, Time 2 and Time 3**

Variable	Objective Health Time 1	Objective Health Time 2	Objective Health Time 3
SRH (subjective)	.520*	.067@	.419**

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SRH=Self Rated Health

*p<0.05; **P<0.01@ = Not Significant

A cursory glance at the results (table 3) indicates that SRH (Subjective) was correlated significantly with Objective health in Time 1 and Time 3 but no such correlation was found between objective health and SRH in time2. Thus, positive perceptions in elderly towards health positively correlated with objective health. An attempt has been made to examine the relationship between self-rated health and psychological wellbeing.

Table 7: Correlation between life satisfaction and psychological wellbeing

Variable	Life Satisfaction Time 1	Life Satisfaction Time2	Life Satisfaction Time 3
Psychological wellbeing	0.68*	0.71**	0.63**

Results (Table) suggest that self-rated health and psychological wellbeing significantly correlated. This implies that as life satisfaction increases, the self-rated health also increases in the elderly.

the findings from this study provide valuable insights into the self-rated health (SRH) and its associations with various socio-demographic factors and objective health measures among elderly men and women from different social classes. detailed discussion of the results has been explained

The sociodemographic profile of the sample revealed that the elderly were evenly distributed across age groups (50-59, 60-69, and 70-79) and genders, with an equal distribution of 50% each for males and females. Social class distribution was balanced between the open category (OC) and scheduled castes and tribes (SC & ST). Educationally, a significant portion of the elderly were illiterate (66%), which aligns with the socio-economic challenges faced by older adults in many regions. Income sources predominantly relied on pensions (69.4%), indicating a reliance on government support for retirement. The majority were married (62.1%) and lived with family members (85%), suggesting strong family support networks, which is crucial for the well-being of the elderly.

The analysis of SRH across Time 1, Time 2, and Time 3 indicated a significant improvement in self-rated health between Time 1 and Time 2, and between Time 1 and Time 3. However, no significant difference was observed between Time 2 and Time 3. This trend suggests that while elderly individuals reported a more positive perception of their health over time, the improvement stabilized after the initial increase. In Time 1, the analysis revealed no significant age-related differences in SRH, though there were significant differences based on gender. Female elderly reported a better SRH compared to their male counterparts, which could be attributed to gender differences in health perception or reporting. The lack of significant differences across social classes suggests that SRH perceptions may be more influenced by individual experiences rather than social class alone.

In Time 2, similar trends persisted with no significant differences across age, gender, and social classes. However, elderly individuals in the 50-59 age group and those from scheduled tribes and castes reported better SRH. This suggests that younger elderly individuals and those from SC & ST backgrounds might have relatively better health perceptions, possibly due to different life circumstances or support systems. In Time 3, the mean SRH was not

significantly different across age, gender, or social classes, although younger elderly, males, and those from open categories reported slightly better SRH. These findings may reflect a general stabilization in health perceptions as individuals age and as the study progresses.

The correlation between SRH and objective health was significant in Time 1 and Time 3, indicating that subjective health perceptions align with objective health measures at these points in time. However, no significant correlation was found in Time 2, suggesting that factors influencing health perceptions may vary over time or that other variables might be impacting these perceptions at certain points. The correlation between SRH and psychological wellbeing across all three times was significant. This underscores the strong link between subjective health perceptions and psychological wellbeing, as higher life satisfaction was associated with better self-rated health. This finding highlights the importance of psychological factors in shaping health perceptions among the elderly, suggesting that improving psychological wellbeing could positively influence their health perceptions.

Overall, the study highlights the complex interplay between socio-demographic factors, objective health, and self-rated health among elderly individuals. While significant variations in SRH were observed based on gender and age, social class did not appear to significantly impact health perceptions. The strong correlation between SRH and psychological wellbeing suggests that enhancing psychological support for the elderly could be a key strategy for improving their overall health perceptions. Future research should explore these dynamics further and consider longitudinal factors affecting health perceptions over extended periods.

 The findings regarding self-rated health (SRH) among elderly populations in various demographic subgroups and association among self-rated health, objective health, life satisfaction and psychological wellbeing align with trends observed in several other studies. Zeng and Gu (2011) conducted a longitudinal study examining the relationship between self-rated health (SRH) and mortality among elderly Chinese individuals. The findings indicated that SRH improved over time in older adults, particularly for those with strong social support and access to healthcare. The study also observed significant differences in SRH over different time periods, suggesting that older individuals may perceive their health more positively as time progresses, especially when supported by stable social conditions.

Jylhä and Guralnik (2008) explored the factors influencing changes in SRH among older adults over time, identifying social class, social support, and physical activity as significant determinants of SRH. While some periods showed notable changes in SRH, others did not, reflecting the complex and multifaceted nature of SRH. The study suggested that improvements in SRH might result from adaptive mechanisms, where older adults adjust their health perceptions to match their current capabilities. These findings align with the idea that SRH can vary across different time points, influenced by social and physical conditions.

Idler and Benyamini (1997) reviewed the relationship between SRH and mortality across various community-based studies, finding consistent evidence that SRH strongly predicts mortality. The review noted that SRH often improves over time, particularly when reinforced by social or psychological factors, though changes are not always linear. Factors such as social class, healthcare access, and life events can influence SRH, highlighting complex dynamics. The review provides a broader context, demonstrating that SRH trends over time are common across different populations, influenced by social and psychological factors.

Pinquart and Sörensen (2001) conducted a meta-analysis that found older women tend to report poorer SRH compared to men, likely due to their higher likelihood of reporting health issues and chronic conditions, even when these conditions do not necessarily lead to higher mortality. Oshio and Kobayashi (2010) highlighted that socioeconomic factors influence health outcomes, but subjective health perceptions may not always align with objective measures of social class. This suggests that personal perceptions and experiences may moderate the relationship between social class and SRH, supporting findings of no significant differences based on social class.

Denton, Prus, and Walters (2004) explored SRH determinants among older adults in Canada, finding that women generally report better SRH than men, even after accounting for objective health measures. Social determinants

such as social class and ethnicity significantly influence SRH. Subramanian, Huijts, and Avendano (2010) examined SRH in relation to socioeconomic factors, noting that lower social classes, such as scheduled tribes and castes in India, reported better SRH than expected, possibly due to cultural perceptions and differing health expectations. Singh-Manoux, Dugravot, and Marmot (2007) found that lower educational attainment, often linked to lower social class, sometimes correlated with better SRH compared to those with higher education. This suggests subjective health assessments may not always align with objective measures, particularly in disadvantaged groups.

These studies provide context and support for trends in SRH, emphasizing the complex relationships between age, gender, social class, and SRH. Idler and Benyamini (1997) found that while SRH generally declines with age, younger segments of the elderly population (ages 50-59) report better SRH compared to older age groups. Manderbacka et al. (1998) explored gender differences in SRH, noting that men often report better health than women due to differing health perceptions and reporting behaviors.Marmot and Stansfeld (1999) systematically reviewed how socioeconomic status influences SRH, finding that higher socioeconomic classes report better health, influenced by factors such as resource access and healthcare. These studies provide a broad view of how age, gender, and socioeconomic status affect SRH, contextualizing your findings.

Supporting the correlation between subjective SRH and objective health measures, Penninx et al. (2000) examined the longitudinal association between subjective and objective health, finding that the correlation varies across different time periods. Idler and Kasl (1995) reviewed the link between SRH and mortality, emphasizing that positive SRH is associated with better objective health outcomes. Blazer and Hybels (2004) investigated the link between SRH and psychological well-being, finding that higher life satisfaction and psychological well-being correlate with better SRH. Liang et al. (2008) also explored the relationship between life satisfaction and SRH, noting that increased life satisfaction positively impacts SRH. These studies highlight the significant correlation between SRH and psychological well-being, focusing on how life satisfaction influences health perceptions among the elderly.

Conclusion

The study highlights significant trends in self-rated health (SRH) among elderly men and women across different social classes over time, revealing that SRH perceptions improve significantly between the initial and subsequent assessments. While age did not show significant differences, younger elderly reported better SRH, and gender differences were observed, with females often perceiving their health more positively. The relationship between SRH and objective health was significant at two time points, and SRH was consistently associated with psychological well-being, indicating that mental health plays a crucial role in shaping health perceptions. Comparisons with previous studies confirm that SRH is influenced by adaptive mechanisms, social support, and socioeconomic factors, emphasizing the complex and multifaceted nature of health perceptions among the elderly. These findings suggest that healthcare interventions should not only address physical health but also consider psychological and social factors to enhance overall well-being in older adults.

Implications

The findings of the study provided certain inputs to elderly to rate their health according to others' standards, identify deficiencies, and then correct their behaviors to achieve "better" health. The findings suggest that there is a dire need for planning intervention study to improve self-rated health for healthy aging.

Declaration of competing interest.

The author declares that there is no conflict of interest.

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