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Research Article

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Successful Aging among Institutionalized Older People: A Study from Nepal

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Abstract

Background: Institutionalized older adults in Nepal experience multiple physical, psychological and social challenges. This study assessed successful aging and examined its association with depression, social participation and sociodemographic factors among elderly residents of old age homes.

Methods: A cross-sectional study was conducted among 208 older adults from seven old age homes. All participants completed sociodemographic and GDS-15 assessments; 104 provided complete Successful Aging Inventory (SAI) data. Descriptive statistics, Pearson correlation, chi-square tests and Mann–Whitney U tests were used.

Results: Among those with complete SAI data, 63.5% were successful agers, although only 14.4% of the total sample met multidimensional successful aging criteria. Depression was prevalent (60.6%) and negatively correlated with successful aging ($r = –.236$, $p = .001$). Social participation showed a positive correlation ($r = .227$, $p = .001$). Sociodemographic factors were not significantly associated with successful aging, but SAI scores differed by sex ($p = .002$).

Conclusion: Despite positive perceptions among some residents, successful aging was limited by depression, low social engagement and functional challenges. Enhancing mental health support and promoting social activities within old age homes may improve successful aging outcomes in Nepal.

Keywords: Successful aging, Institutionalized elderly, Depression, Social participation, Nepal, Older adults

Introduction

The global population is aging at a rapid pace, with older adults representing an increasingly significant demographic group across both developed and developing nations [1,2]. As life expectancy rises and family structures evolve, the concept of successful aging has become a central focus of public health research and policy [3]. Successful aging encompasses physical health, psychological well-being, functional independence, social participation, and a meaningful life [4,5]. International evidence shows considerable variation in successful aging outcomes, shaped by cultural norms, socioeconomic conditions, and living environments [6,7].

In Nepal, demographic transitions are reshaping the aging experience. The proportion of older adults is steadily increasing,

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accompanied by changes in traditional extended family structures and growing socioeconomic pressures [8]. Studies have documented significant shifts in aging patterns, living arrangements, and family support systems, noting that older adults increasingly face weakened social support networks and socioeconomic vulnerability [9-11]. Older adults living alone or with limited family support frequently report reduced well-being, social isolation, and higher levels of anxiety and depression [12].

Institutionalization of elderly individuals is becoming more common due to migration, urbanization, and declining caregiving capacity [13]. Research in Nepal has shown that residents of old age homes often experience poorer health, emotional distress, and limited social interaction [10,14]. Institutionalized elders also display higher levels of loneliness and depression compared to community-dwelling elders [15]. These findings highlight the vulnerability of older adults in institutional care and the importance of understanding their aging experiences.

Although Nepal has a growing body of research on elderly health and psychosocial well-being [12,16,17], limited investigation exists on multidimensional successful aging among residents of old age homes. Most prior studies have focused on single aging domains rather than an integrated physical, psychological, social, and spiritual framework. International evidence suggests that successful aging is influenced by broader psychosocial and cultural factors-including resilience, social engagement, and spirituality [18,19]. However, such multidimensional evidence is lacking in Nepal's institutional context.

Given the rising number of older adults in care facilities and consistently high levels of depression, loneliness, and functional decline among institutionalized elders [10,15,20], research on the multidimensional successful aging experience is essential. Understanding the interplay of sociodemographic factors, mental health, and social participation is critical for informing interventions and policies.

The present study aims to assess successful aging and examine its association with sociodemographic characteristics, depression, and social participation among elderly residents of old age homes in Kathmandu District. By applying a multidimensional approach, this study addresses gaps in Nepal's aging research and contributes evidence for improving care for its aging population.

Method

Study Design

A cross-sectional analytical design was employed to assess successful aging and its associated sociodemographic, psychological, and social factors among older adults in institutional care settings in Kathmandu District. Cross-sectional designs are widely used in gerontological and public health research to estimate the prevalence of aging-related constructs and mental health outcomes [21-23].

Study Setting and Population

The study was conducted in seven old age homes in Kathmandu District. Institutional living arrangements are increasingly common in South Asia due to changing family structures and migration patterns. All residents aged 60 years and above were eligible for participation. The sampling frame consisted of 239 elderly individuals.

Sample Size and Sampling Strategy

A complete enumeration sampling approach was utilized, wherein all eligible residents were invited to participate. A total of 208 older adults were successfully interviewed, yielding a high response rate typical of institutional-based studies [10]. All participants completed the sociodemographic questionnaire and the Geriatric Depression Scale (GDS-15). Due to missing or incomplete responses in the Successful Aging Inventory (SAI), a total of 104 participants had fully completed SAI forms. Analyses involving SAI-such as categorization of successful aging, assessment of SAI components, and correlations with psychological variables—were therefore conducted using complete-case analysis, a widely accepted method for handling missing data in cross-sectional research [7].

Inclusion and Exclusion Criteria

Participants were included if they were 60 years or older, residing in the selected old age homes, able to listen, communicate, and provide informed consent. Exclusion criteria included severe physical or neurological disabilities (such as stroke, advanced Parkinson's disease, or dementia), terminal illness, severe mental health conditions, or an inability to meaningfully respond to interview questions. These criteria align with previous studies assessing physical, cognitive, and psychosocial functioning among older adults.

Data Collection Instruments

Sociodemographic Questionnaire: Sociodemographic data were collected using a structured survey tool adapted from the WHO Study on Global Ageing and Adult Health (SAGE). The tool captures domains relevant to older adult health, including residence history, marital status, education, and occupational background [24,25].

Geriatric Depression Scale (GDS-15): Depression was assessed using the 15-item Geriatric Depression Scale (GDS-15), a widely validated screening tool for late-life depression [26,27]. Respondents answered "Yes" or "No" to each item based on how they felt at the time of the interview. Scores from 0 to 5 indicated non-depressive status, whereas scores of 6 to 15 indicated depressive symptomatology. In the present study, the GDS-15 demonstrated acceptable internal consistency (Cronbach's $\alpha = .67$), consistent with findings from similar research in elderly populations [28].

Successful Aging Inventory (SAI): The SAI, developed by Troutman et al. [29], consists of 20 items assessing functional

performance, intrapsychic well-being, spirituality, and Gero transcendence. It uses a 5-point Likert scale, and the instrument has demonstrated strong reliability in multiple cultural contexts [18,30]. In this study, the SAI showed excellent reliability (Cronbach's α = 0.96).

Operational Definition of Successful Aging

Participants were classified as successful agers or usual agers based on established SAI cutoff criteria consistent with Troutman et al. (2011) and subsequent applications in Asian populations [29,31]. Additionally, full multidimensional successful aging was examined by integrating physical, psychological, and social health indicators, consistent with Rowe and Kahn model [4,5].

Data Collection Procedure

Data were collected through face-to-face interviews conducted by trained public health researchers. Structured interviews are considered the most reliable approach when assessing psychological and cognitive constructs among older adults, particularly in populations with low literacy levels [16,32]. Interviews were conducted in a private setting within each facility to maintain confidentiality and maximize response accuracy.

Ethical Considerations

Ethical approval was granted by the Institutional Review Committee (IRC) of Nobel College. Permission letters were obtained from the administrative authorities of each old age home. Written informed consent was secured from every participant. Privacy, confidentiality and voluntary participation were strictly maintained throughout the study, adhering to international ethical standards for research involving vulnerable elderly populations.

Data Management and Statistical Analysis

Data were checked daily for accuracy and completeness, entered into Excel, and analysed using SPSS Version 20. Descriptive statistics summarized sociodemographic and health variables. Pearson correlation assessed relationships between SAI scores, depression, and social participation, following previous gerontology research standards [7]. Chi-square tests examined associations between successful aging and categorical variables. Mann–Whitney U tests were used for group comparisons due to non-normal SAI distribution, consistent with recommended practices for ordinal data [33]. Statistical significance was set at $p < .05$.

Results

Socio-demographic Characteristics

A total of 208 older adults were included in this study. Their ages ranged from 60 to 97 years, with a mean age of 75.0 years (SD = 8.10). Nearly half of the respondents (45.2%) were between 71 and 80 years of age, while 28.8% were aged 60–70 years and 26.0% were above 80 years. The majority of participants were female (75.0%), widowed (53.8%) and originally from rural areas (68.3%). Most respondents were illiterate (72.1%), and more than half (62.5%) reported having no contact with family members. Over half of the respondents (56.7%) had been living in the old age home for five years or less (Table 1).

Table1. Socio-demographic characteristics of the respondents.

Variables	Frequency (n=208)	Percentage (%)
Age group (years)		
(60-70)	60	28.8
(71-80)	94	45.2
(81+)	54	26.0
Sex		
Male	52	25
Female	156	75
Marital Status		
Married	12	5.8
Unmarried	26	12.5
Divorced/Separated	28	13.5
Widow	112	53.8
Widower	30	14.4
Marital Status		
Urban	66	31.7
Rural	142	68.3
Educational Status		
Illiterate	150	72.1

Primary level (1-4)	20	9.6
Lower Secondary level (5-8)	24	11.5
Higher Secondary level (9-12)	8	3.8
Higher level (12 +)	6	2.9
Marital Status		
Employed	130	62.5
Unemployed	78	37.5
Duration of stay in this place (years)		
0-5	118	56.7
05-Oct	60	28.8
Oct-15	20	9.6
15-20	2	1
20-25	2	1
25-30	2	1
30-35	2	1
35+	2	1
Contact with family members		
Yes	78	37.5
No	130	62.5

Depression Status Among Study Respondents

Depression was measured among all 208 participants. Based on the established cutoff, 60.6% were classified as depressed, while 39.4% showed no depressive symptoms. Item-wise responses revealed that 65.4% of participants were satisfied with their lives; however, 49.0% felt their life was empty, 50.0% often felt bored, 45.2% felt helpless and 60.6% reported memory problems. Although 92.3% reported being in good spirits most of the time and 72.1% felt it was wonderful to be alive, 43.3% stated that their situation felt hopeless and nearly half (47.1%) felt worthless. These findings suggest a substantial psychological burden among institutionalized older adults (Table 2).

Table 2: Responses of Study Participants to the Geriatric Depression Scale–Short Form (GDS-SF) Items n=208.

GDS Characteristics	Yes (Frequency %)	No (Frequency %)
Q.1: Are you basically satisfied with your life?	136, 65.4	72, 34.6
Q.2: Have you dropped many of your activities and interest?	98, 47.1	110, 52.9
Q.3: Do you feel that your life is empty?	102, 49	106, 51
Q.4: Do you often get bored?	104,50	104, 50
Q.5: Are you in good spirits most of the time?	192, 92.3	16, 7.7
Q.6: Are you afraid that something bad is going to happen to you?	116,55.8	92, 44.2
Q.7: Do you feel happy most of the time?	130, 62.5	78, 37.5
Q.8: Do you often feel helpless?	94,45.2	114,54.8
Q.9: Do you prefer to stay at home, rather than going out and doing new things?	108,51.9	100,48.1
Q.10: Do you feel you have more problems with memory than most?	126,60.6	82,39.4
Q.11: Do you think it is wonderful to be alive now?	150,72.1	58, 27.9
Q.12: Do you feel pretty worthless the way you are now?	98,47.1	110, 52.9
Q.13: Do you feel full of energy?	98,47.1	110, 52.9
Q.14: Do you feel that your situation is hopeless?	90, 43.3	118,56.7
Q.15: Do you think that most people are better off than you are?	102, 49.0	106,51.0

Successful aging Index (SAI)

A total of 104 participants had complete responses for the Successful Aging Inventory (SAI). Among them, 63.5% (n = 66) were identified as successful agers, whereas 36.5% (n = 38) were usual agers. Functional performance was moderately strong, with 51.9% strongly agreeing that they were able to manage self-care and activities of daily living, and 42.3% reporting they could cope with physical changes associated with aging. Intrapsychic measures showed that many respondents looked forward to the future and felt able to deal with their aging, although neutral or disagreeing responses were common for creativity, problem-solving and maintaining a positive mood. Spirituality emerged as the strongest dimension of successful aging; 63.5% strongly agreed they regularly engaged in religious activities, and 51.9% strongly agreed that a relationship with a higher power was important to them. In the gero transcendence domain, a substantial proportion of respondents somewhat agreed that their worldview had changed with age, that they valued close friendships, felt connected to future generations, and believed that their lives were meaningful.

When considering successful aging across all three domains-physical, psychological and social-only 14.4% of the total sample (N = 208) met the criteria for complete multidimensional successful aging (Table 3).

Table 3: Distribution of SAI score among respondents.

SAI Item	Strongly Disagree n (%)	Somewhat Disagree n (%)	Neutral n (%)	Somewhat Agree n (%)	Strongly Agree n (%)
Manage self-care	2 (1.0)	28 (6.7)	42 (20.2)	42 (20.2)	108 (51.9)
Cope with changes	4 (1.9)	68 (32.7)	28 (13.5)	88 (42.3)	20 (9.6)
Look forward to future	28 (13.5)	60 (28.8)	38 (18.3)	80 (38.5)	2 (1.0)
Able to deal with aging	13 (12.5)	29 (27.9)	12 (11.5)	30 (28.8)	20 (19.2)
Cope with life events	14 (13.5)	33 (31.7)	29 (27.9)	22 (21.2)	6 (5.8)
Solution to problems	31 (29.8)	39 (37.5)	21 (20.2)	12 (11.5)	1 (1.0)
New ways to solve problems	9 (8.7)	30 (28.8)	42 (40.4)	22 (21.2)	1 (1.0)
Creative new things	12 (11.5)	50 (48.1)	34 (32.7)	8 (7.7)	0 (0.0)
Positive pleasant mood	0 (0.0)	37 (35.6)	12 (11.5)	36 (34.6)	19 (18.3)
Feel close to lost loved ones	12 (11.5)	38 (36.5)	16 (15.4)	31 (29.8)	7 (6.7)
Prayer/Religious activity	0 (0.0)	0 (0.0)	13 (12.5)	25 (24.0)	66 (63.5)
Worldview changed	3 (2.9)	28 (26.9)	12 (11.5)	51 (49.0)	10 (9.6)
Prefer close friends	7 (6.7)	29 (27.9)	20 (19.2)	36 (34.6)	12 (11.5)
Two right answers	1 (1.0)	33 (31.7)	17 (16.3)	49 (47.1)	4 (3.8)
Relationship with God	0 (0.0)	0 (0.0)	19 (18.3)	31 (29.8)	54 (51.9)
Concern for next generation	12 (11.5)	27 (26.0)	19 (18.3)	37 (35.6)	9 (8.7)
Life is meaningful	8 (7.7)	26 (25.0)	10 (9.6)	45 (43.3)	15 (14.4)
Satisfied with life	0 (0.0)	12 (11.5)	32 (30.8)	50 (48.1)	10 (9.6)
Serve a purpose	0 (0.0)	0 (0.0)	33 (31.7)	51 (49.0)	20 (19.2)
Being this age is good	0 (0.0)	1 (1.0)	18 (17.3)	29 (27.9)	56 (53.8)

Successful Aging Score through SAI among Study Respondents

Table 4: Successful aging score through SAI among study respondents.

Variables	Frequency (n=104)	Percentage (%)
Successful agers	66	63.5
Usual agers	38	36.5

Above table showed the information regarding SA among study respondents through SAI analysis. Result obtained that, out of total respondents, majority of the respondents (63.5%) were successful agers while less than half respondents (36.5%) were usual agers.

Correlation Analysis

Correlation analysis was conducted among respondents with complete SAI data (n = 104). A statistically significant negative correlation was found between SAI scores and GDS scores (r = −.236, p = .001), indicating that higher levels of depressive symptoms were associated with lower successful aging. In contrast, SAI scores were positively correlated with social participation (r = .227, p = .001), demonstrating that individuals who engaged more frequently in social activities experienced higher levels of successful aging. Age was negatively correlated with social participation (r = −.276), indicating that engagement in social activities decreased as age increased (Table 5).

Table 5: Correlation Matrix of Study Variables.

Variables	SAI Score	GDS Score	Social Participation	Age
SAI Score	—	-.236**	.227**	-0.114
GDS Score	-.236**	—	-.198*	0.089
Social Participation	.227**	-.198*	—	-.276**
Age	-0.114	0.089	-.276**	—

*Note: p < .05 → 5% significance level, p < .01 → 1% significance level

Association between Successful Aging and Sociodemographic Variables

Chi-square analyses revealed no statistically significant associations between successful aging status and sociodemographic characteristics such as age group, sex, marital status, residence, education, previous occupation or family contact. Although older individuals, females and those previously employed showed slightly higher proportions of successful aging, these differences did not reach statistical significance. Depression status was also not significantly associated with successful aging (p = .099), though a higher proportion of successful agers were depressed (54.5%) compared to non-depressed (45.5%) (Table 6).

Table 6: Chi-Square Analysis of Sociodemographic and Health-Related Variables.

Variable	χ^2 Value	p-value	Odds Ratio (95% CI)	Interpretation
Age group	3.687	0.056	2.44 (0.97–6.14)	Not significant
Sex	2.709	0.157	2.32 (0.84–6.42)	Not significant
Education level	0.034	0.855	0.92 (0.38–2.23)	Not significant
Prior occupation	0.896	0.346	1.50 (0.65–3.48)	Not significant
Prior residence	0.722	0.398	0.69 (0.30–1.62)	Not significant
Marital status	0.279	0.599	0.74 (0.24–2.31)	Not significant
Family contact	0.896	0.346	1.50 (0.65–3.48)	Not significant
Depression status	2.752	0.099	2.05 (0.87–4.79)	Not significant

Mann–Whitney U Test

A Mann–Whitney U test was performed to compare SAI scores across demographic and health-related subgroups due to the non-normal distribution of SAI data. A statistically significant difference in SAI scores was observed only between male and female respondents (U = 598.00, p = .002), indicating that perceptions of successful aging differed by sex. No significant differences were found for age, marital status, residence, occupation, education or depression status (Table 7).

Table 7: Mann–Whitney U Test Results for Differences Across Participant Characteristics.

Variable	U Value	p-value	Significant?
Sex	598	0.002	Yes
Age	1193	0.68	No
Marital status	480.5	0.15	No
Residence	1125	0.74	No
Occupation	1070.5	0.18	No
Education	876	0.12	No
Depression status	1215	0.61	No

*Note: p < .05 indicates statistical significance at 5% significance level.

Discussion

This study examined successful aging and its associated sociodemographic, psychological, and social determinants among older adults residing in institutional care settings in Kathmandu District. Although a majority of respondents with complete SAI data were categorized as successful agers, only a small proportion of the overall sample met multidimensional successful aging criteria, reflecting the complex nature of aging. The demographic patterns observed-particularly the predominance of women in old age homes—align with broader demographic transitions in Nepal and South Asia. Older women often experience longer life expectancy, limited financial autonomy, and greater social vulnerability, making them more likely to require institutional care [9,34]. High levels of illiteracy among participants further reflect long-standing inequalities that influence coping capacity, health literacy, and overall, wellbeing in later life [35].

Depression prevalence in this study (60.6%) was high and consistent with previous findings indicating that institutionalized older adults are at significant risk for psychological distress [10,14,15]. Frequently reported emotional concerns-including helplessness, boredom, emptiness, and memory problems-mirror earlier research showing that institutional environments may heighten psychological burden. The significant negative correlation between depression and successful aging underscores the essential role of psychological wellbeing in shaping perceptions of aging success. Similar patterns have been found in international studies linking depression to poorer aging outcomes [28,36].

Social participation exhibited a positive association with successful aging, highlighting the importance of social engagement in promoting resilience, self-esteem, and overall quality of life [18,37]. However, social engagement declined as age increased, likely due to physical limitations, chronic illness, mobility restrictions, or institutional constraints. Expanding structured opportunities for recreational, social, and community activities could therefore help enhance aging outcomes. Spirituality emerged as a strongly endorsed dimension of successful aging, reflecting its cultural significance in Nepal. Prior research suggests that spiritual practices support emotional resilience, promote acceptance of aging, and provide meaning in later life [16,38]. Many respondents demonstrated satisfaction with life and maintained a sense of purpose despite various challenges, suggesting that spirituality may mitigate psychological distress.

No sociodemographic characteristics-age, sex, marital status, occupation, education, or residence-were significantly associated with successful aging in chi square analysis, although subtle trends existed. The absence of significant associations may reflect the relative homogeneity of institutionalized populations, who share similar life histories and environmental conditions. However, the Mann–Whitney U test showed that males reported significantly higher SAI scores than females, indicating potential gender differences in aging perceptions that warrant further study [35].

Overall, the findings highlight the interconnected roles of psychological wellbeing, spirituality, and social participation in shaping successful aging among institutionalized older adults. Despite resilience and strong spiritual foundations, high depression levels, limited functional independence, and reduced problem-solving capacity restricted multidimensional aging success. Interventions may include mental health counselling, structured social activities, mobility enhancing programs, and culturally meaningful spiritual engagement.

These findings should be viewed in light of several limitations. Only half of the sample completed all SAI items, limiting the wide applicability of SAI related results. The cross-sectional design precludes causal inferences, and institutional settings limit generalizability to community dwelling older adults. Self-reported data may also be affected by recall or social desirability biases. Data collection during the COVID-19 pandemic likely influenced both participation and response patterns [38–42]. Future research should adopt larger samples, longitudinal designs, and qualitative approaches to better understand cultural interpretations of successful aging better.

Conclusion

This study demonstrates that while many institutionalized older adults perceive themselves as aging successfully, substantial challenges remain across psychological, social, and functional domains. Depression was common and negatively associated with successful aging, whereas social participation and spirituality contributed positively. These findings highlight the importance of mental health support, social engagement opportunities, and culturally meaningful activities within old age homes. Strengthening institutional care systems and addressing the psychosocial needs of older adults may promote healthier and more successful aging trajectories in Nepal.

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