THE RELATIONSHIP BETWEEN QUALITY OF LIFE AND SUCCESSFUL AGING

Reini Astuti[1], Tri Wahyuningsih[1], Ratna Wulan Hadian[1]

[1]DIII Nursing Study Program, STIKes Budi Luhur Cimahi

ABSTRACT

The elderly population is increasing rapidly worldwide, including in Indonesia, leading to significant health, social, and economic implications. The aging process often leads to physical, psychological, and social changes that can negatively affect quality of life.Thus, ensuring a high quality of life is crucial for achieving successful aging. This study aimed to analyze the relationship between the quality of life and successful aging among elderly individuals in Cimahi City. A cross-sectional study was conducted with 128 elderly participants, selected proportionally WHOQOL-BREF and SAS should be briefly explained with full names in parentheses when first mentioned for clarity to readers unfamiliar with them. Was used to assess quality of life, while the Successful Aging Scale (SAS) was employed to evaluate successful aging. Bivariate analysis was performed using the Chi-square test at a significance level of $p<0.05$. A significant relationship was found between successful aging and the physical ($p=0.003$), psychological ($p=0.000$), and environmental ($p=0.002$) domains of quality of life. However, no significant association was observed in the social domain ($p=0.114$). The results suggest that physical health, psychological well-being, and environmental support are key factors contributing to successful aging. Social relationships, though important, did not show a statistically significant impact in this study. Health interventions and policies aimed at promoting successful aging should prioritize improving the quality of life for the elderly, particularly by enhancing physical and mental health and ensuring a supportive and secure living environment.

Keywords: Elderly, Quality of life, Successful aging

Correspondence
Reini Astuti
STIKes Budi Luhur Cimahi
Jl. Kerkoff no 243 Cimahi, Jawa Barat, Indonesia
reini.ast@gmail.com

INTRODUCTION

The global elderly population is growing steadily, with significant health, social, and economic implications. In 2015, there were 901 million older adults worldwide, representing approximately 12% of the total global population. This number is projected to increase to 1.4 billion by 2030 and 2.1 billion by 2050 (WHO, 2023; Barnett, 2017). Indonesia is experiencing a similar demographic transition, with estimates suggesting that by 2045, the elderly population will reach 63.3 million, representing 19.9% of the country's total population (BPS, 2022).

Elderly individuals, defined as those aged 60 years and older, generally experience a gradual decline in physical, psychological, and social functioning. While aging is a natural and continuous process, its impacts become more noticeable with age, including reduced organ function, lower physical endurance, and decreased resilience (Astuti, 2023). Physiological changes may involve declines in cellular activity, reduced bodily fluids, loss of vascular elasticity, and an increased susceptibility to chronic diseases. Psychological and social changes can lead to feelings of helplessness, loneliness, and a diminished sense of purpose, particularly when older adults lack a supportive environment (Juniarni, 2020).

In response to these challenges, the concepts of active aging and successful aging have emerged. According to the World Health Organization (WHO), active aging involves optimizing health, participation, and security to enhance quality of life in later years. Conversely, successful aging refers to maintaining good physical and cognitive health, avoiding major illnesses or disabilities, and continuing to engage socially (Rowe & Kahn, 1997; WHO, 2002).

Quality of life is crucial for achieving successful aging. The WHO defines quality of life as an individual's perception of their position in life within their cultural and value context, considering their personal goals, expectations, and concerns. It is assessed across four primary domains: physical health, psychological well-being, social relationships, and environmental conditions (WHOQOL-BREF).

Improving quality of life in later years is a fundamental component of achieving successful aging. In Indonesia, however, many older adults—especially women, individuals with limited educational attainment, those who are unemployed, and residents of rural or peri-urban areas—continue to face challenges related to physical, psychological, and social well-being. Cimahi City, located in West Java, exemplifies these disparities. Although urban, Cimahi still contends with limited geriatric-specific health services and insufficient infrastructure in senior facilities, such as Panti Werdha (nursing homes) and community-based elder care centers. Moreover, the cultural expectation that family members, particularly daughters or daughters-in-law, serve as primary caregivers can strain household dynamics, especially among lower-income families. Despite these challenges, comprehensive data on how such socio-cultural and systemic factors influence elderly quality of life and aging outcomes in Cimahi remain scarce. Therefore, this study seeks to examine the relationship between quality of life and successful aging among elderly residents in Cimahi City. The results are expected to inform the development of gerontological care strategies and age-inclusive public health policies tailored to the local context.

METHOD

This study employed a cross-sectional design and was conducted in Cimahi City, where the total population in 2024 was recorded at 57,480, with elderly individuals (aged ≥60 years) comprising approximately 9% of the population. A total of 128 participants were selected using a proportional stratified sampling technique based on the number of elderly residents across the city's three subdistricts (Cimahi Utara, Cimahi Tengah, and Cimahi Selatan). Within each subdistrict,

proportional allocation was made based on data from the local Population and Civil Registration Office. Subsequently, participants were recruited randomly within each subdistrict using neighborhood units (Rukun Warga or RW) as sampling frames, ensuring fair representation of each area. The sample size was slightly increased to anticipate possible non-response.

Data were collected using a structured questionnaire administered via Google Forms. The survey link was distributed through community health posts (Posyandu Lansia) and elderly associations in each neighborhood unit, with random selection among eligible elderly residents. The study investigated successful aging as the dependent variable and quality of life as the independent variable.

According to the World Health Organization (WHO), quality of life refers to an individual's subjective perception of their life situation, shaped by cultural context, personal values, aspirations, and concerns. Brajković (2009) highlighted the effectiveness of the WHOQOL-BREF instrument in evaluating quality of life among older adults, as it assesses four critical domains: Physical health, Psychological well-being, Social relationships, and Environmental factors.

For this study, the Indonesian adaptation of WHOQOL-BREF was employed. The translation and cultural adaptation were conducted by a team of experts, including Dr. Ratna Mardiati, Satya Joewana (Atma Jaya Catholic University, Jakarta), Dr. Hartati Kurniadi, Isfandari (Indonesian Ministry of Health), Riza Sarasvita, and Fatmawati (Jakarta Narcotics Hospital). The questionnaire comprises two main sections: overall quality of life (2 items), and general health perception (24 items across four domains) including physical health (7 items), psychological state (6 items), social relationships (3 items), and environmental conditions (8 items).

Table 1. Blue Prints of Quality of Life in WHOQOL-BREF Scale Responses

Dimension	Indicator	Item	Total
General Health	General quality of life and general quality of health	1,2	2
Physical Health	Pain, discomfort, energy for daily activities, exhaustion, mobility, daily activities, and working conditions	3,4,10,15,16,1 7,18	7
Psychological	Positive feelings, negative feelings, self-satisfaction, thinking ability and concentration, self-appearance, and feelings of self-worth.	5,6,7,11,19,2 6	6
Social Relations	Relationship with people, sexual life, and social support	20,21,22	3
Environment	Money income, information availability, recreation and entertainment, neighborhood, access to health and social services, feelings of safety, physical environment, and transportation.	8,9,12,13,14,2 3,24,25	8
Total Items		**27**	**27**

The dependent variable, Successful Aging, is based on two core dimensions identified by

Hazer and Özsungur (2017): the adoption of healthy lifestyle habits and the ability to cope with adversity. This construct is assessed using the Successful Aging Scale (SAS), which includes a total of 10 positively framed statements (Oya Hazer, 2017).

The SAS developed by Hazer and Özsungur (2017) uses a Likert-type scale with seven response categories: very appropriate, appropriate, moderately appropriate, unsure, somewhat inappropriate, inappropriate, and very inappropriate. Each response is scored from 7 to 1, respectively: a score of 7 indicates a "very appropriate" response, while a score of 1 represents "very inappropriate." This scoring system captures the extent to which respondents perceive themselves as successfully aging based on their agreement with each of the ten items.

Table 2. Blueprint of Successful aging

Indicator	Item		Total
	Favorable	Unfavorable	
Lifestyle Habits Healthy	1,2,3	-	3
Struggling Against Adversity	4,5,6,7,8,9,10	-	7
TOTAL	10	0	10

Data processing analysis using frequency and mean calculations utilizing computer software whose processing is assisted by statisticians. This research is at TKT one towards TKT two.

RESULTS

The majority of elderly participants were categorized as having unsuccessful aging, totaling 79 individuals (61.7%) as seen in Table 3.

Table 3. Overview of Successful Aging Among the Elderly in Cimahi City

Successful Aging	Frequency (n)"	Percentage (%)
Successful	49	38.3
Unsuccessful	79	61.7
Total	128	100.0

Based on the table 4 below, it was found that the majority of elderly participants had a good quality of life in the physical health domain, with 70 individuals (54.7%) falling into this category.

Table 4. Overview of the quality of life of the elderly in physical health aspects

Physical Domain	Frequency (n)"	Percentage (%)
Good Quality	70	54.7
Poor	58	45.3
Total	128	100.00

It is found that most of the elderly have quality of life in the quality category in the aspect of psychological well-being, namely 72 elderly (56.3%).

Table 5. Overview of the quality of life of the elderly in the aspect of psychological well-being

Psychology Domain	Frequency (n)"	Percentage (%)
Good Quality	72	56,3
Poor	56	43.8
Total	128	100.00

Based on the table below, it is found that most of the elderly have a quality of life category in social aspects, namely 86 elderly people (67.2%).

Table 6. Overview of the Quality of Life of the Elderly in the Social Domain

Social Domain	Frequency (n)"	Percentage (%)
Good Quality	86	67.2
Poor	42	32.8
Total	128	100.00

It is found that most of the elderly have a quality of life category in the environmental aspect, namely 69 elderly (53.9%).

Table 7. Overview of the quality of life of the elderly in environmental aspects

Environmental Domain	Frequency (n)"	Percentage (%)
Good Quality	69	53.9
Poor	59	46.1
Total	128	100.0

The table shows a significant relationship between the physical, psychological, and environmental domains and successful aging, with p-values of 0.003, 0.000, and 0.000 respectively ($p < 0.05$). In contrast, the social domain was not significantly associated with successful aging, as indicated by a p-value of 0.114 ($p > 0.05$).

Table 8. Bivariate Analysis of Quality of Life Domains (Physical, Psychological, Social, and Environmental) and Their Association with Successful Aging

Variables	Category	Successful		Unsuccessful		p-value
		n	%	n	%	
Physical Domain	Good Quality	35	71.4	35	44.3	0,003
	Poor	14	28.6	44	55.7	
Psychology Domain	Good Quality	41	83.7	31	39.2	0,0001
	Poor	8	16.3	48	60.8	
Social Domain	Good Quality	37	75.5	49	62	0,114
	Poor	12	24.5	30	38	
Environmental Domain	Good Quality	35	71.4	34	43	0,002
	Poor	14	28.6	45	57	
Total		49	100	79	100	

DISCUSSION

The results of this study Indicates show that there is a significant relationship between quality of life in the physical, psychological, and environmental domains and the achievement of successful aging in the elderly. However, the social domain did not show a significant relationship. The results that internal factors may play a more dominant role in determining successful aging compared to social factors alone.

Physical health is a fundamental component of successful aging. Elderly people who are in good physical condition tend to have higher levels of functional ability, mobility, and independence. This supports the theory by Rowe and Kahn (1997), which highlights low disease risk and maintenance of physical function as two of the three essential elements of successful aging. The elderly can improve this aspect through routine physical activity, balanced nutrition, and effective chronic disease management.

In addition, good physical condition allows elderly to engage in more social and recreational activities, which in turn supports other domains of life satisfaction. Maintaining an active lifestyle not only prevents physical decline but also increases self-confidence and autonomy.

The psychological domain also shows a strong correlation with successful aging. Seniors who demonstrate high levels of resilience, optimism, and satisfaction with life are more likely to enjoy better mental health and overall well-being. These findings align with the work of Jeste et al. (2013) and Henry et al. (2022), who emphasize the role of mental strength in facing the physical and emotional challenges of aging.

Moreover, older adults who view aging positively tend to cope better with life transitions such as retirement, loss of loved ones, or decreasing physical abilities. Interventions like counseling, mindfulness training, and support groups can help strengthen psychological resilience and promote mental health in the elderly.

The environmental domain also has a significant influence on successful aging. A comfortable and safe environment—complete with access to healthcare facilities, green spaces, and age-friendly public infrastructure—can greatly enhance the daily life experience of the elderly. This is consistent with the findings of Liu et al. (2016) and Jang (2020), which indicate that a supportive environment contributes to reduced stress levels, better health

outcomes, and increased social engagement among older adults.

A conducive environment also promotes independence by reducing physical barriers and ensuring accessibility. For example, public spaces that accommodate mobility limitations or neighborhoods with good security can encourage the elderly to stay active and engaged with their surroundings.

On the other hand, the social domain did not show a statistically significant relationship with successful aging in this study. However, this does not mean social factors are unimportant. Reichstadt et al. (2010) emphasize that the quality of social relationships is more important than the quantity. Meaningful social connections can increase a sense of belonging and improve self-worth, while negative or superficial relationships may contribute to emotional distress.

One possible reason the social domain was not significantly associated could be due to measurement limitations. The perception of social support is highly subjective and may be influenced by cultural norms, personal expectations, or previous life experiences. In some contexts, the elderly may rely more on internal coping mechanisms than on social networks.

Furthermore, the lack of significance in the social domain may also reflect changes in social roles in old age. As older adults may face reduced involvement in community roles or family functions, their perception of social relevance could shift, impacting how they value or assess their social relationships.

Overall, these findings reaffirm that successful aging is multidimensional, resulting from complex interactions between physical, psychological, environmental, and social factors. Therefore, interventions must be comprehensive, taking into account all aspects of life to improve the well-being of the elderly population.

A person-centered approach is essential, where each intervention is tailored to individual needs and preferences. By focusing not only on disease prevention but also on empowerment and quality of life, we can better support older adults in achieving successful aging.

CONCLUSIONS

This study concludes that quality of life in the physical, psychological, and environmental domains is significantly associated with the achievement of successful aging among older adults in Cimahi City. Although the social domain is an important component of overall well-being, it did not demonstrate a statistically significant relationship in this context.

These findings indicate that internal factors—such as physical health and psychological resilience—play a more prominent role in determining the quality of aging than social support alone. This underscores the importance of strengthening both physical and mental health among older populations.

Nevertheless, social relationships should not be disregarded. While they were not statistically significant in this study, they may still influence other dimensions of health and indirectly contribute to the aging process.

RECOMMENDATIONS

Based on the findings, several recommendations are proposed:
1. Implement community-based intervention programs that promote regular physical activity, balanced nutrition, and chronic disease management to preserve and enhance physical functioning among older adults.
2. Prioritize mental health support by expanding access to psychological services, counseling, and resilience training specifically tailored for the elderly. Programs that foster self-esteem, emotional expression, and stress coping skills can significantly enhance psychological well-being.
3. Promote age-friendly environments, including accessible infrastructure, safe neighborhoods, and inclusive public spaces that encourage mobility, independence, and social interaction. These initiatives should be integrated into urban planning and public health policy.
4. Enhance education for families and caregivers to support meaningful, respectful, and empowering interactions with older adults. Training programs for caregivers can improve their ability to foster autonomy and dignity in elderly care.
5. Encourage social engagement activities, such as intergenerational programs, peer support groups, or volunteering opportunities. Even though social interaction did not show statistical significance in this study, it remains valuable for promoting emotional health and life satisfaction.
6. Adopt a holistic, person-centered policy framework that incorporates physical, psychological, environmental, and social aspects of aging. This approach ensures that each elderly individual is recognized and supported according to their specific needs, experiences, and life circumstances.

By implementing these recommendations, stakeholders—including governments, healthcare providers, and communities—can work together to support older adults in achieving a successful, meaningful, and dignified aging process.

REFERENCES

Astuti, R. (2023). *Gerontic care: A holistic approach for the elderly*. Jambi, Indonesia: Sonpedia Publishing Indonesia.

Baltes, P. B., & Baltes, M. M. (2010). Successful aging: Perspectives from the behavioral sciences. In *Psychological perspectives on successful aging* (pp. 1–34). Cambridge University Press.

Bowling, A. (2007). Redefining successful aging: A qualitative study among older adults. *International Journal of Aging and Human Development*, *64*(3), 263–297. https://doi.org/10.2190/L0K1-87W4-9R01-7127

Cernin, P. A., Lysack, C. L., & Lichtenberg, P. A. (2011). Racial differences in perceived and objective measures of successful aging. *Clinical Gerontologist*, *34*(2), 89–102. https://doi.org/10.1080/07317115.2011.539525

Henry, J. D., Coundouris, S. P., Mead, J., & Thompson, B. (2022). Social frailty and psychological well-being in late adulthood. *Journals of Gerontology: Series B*, *78*(1), 87–96. https://doi.org/10.1093/geronb/gbac157

Jang, H.-Y. (2020). Ecological predictors of successful aging in community-dwelling elders. *International Journal of Environmental Research and Public Health*, *17*(9), 3220. https://doi.org/10.3390/ijerph17093220

Jeste, D. V., Savla, G. N., Thompson, W. K., & Depp, C. A. (2013). Resilience and depression as predictors of successful aging. *American Journal of Psychiatry*, *170*(2), 188–196. https://doi.org/10.1176/appi.ajp.2012.12030386

Liu, H., Byles, J. E., & Xu, X. (2016). Assessing successful aging in Chinese older adults. *Geriatrics & Gerontology International*, *17*(8), 1183–1190. https://doi.org/10.1111/ggi.12848

Paggi, M. E., Jopp, D. S., & Hertzog, C. (2016). Leisure activities and health outcomes in aging. *Gerontology*, *62*(4), 450–458. https://doi.org/10.1159/000444415

Reichstadt, J., Depp, C. A., & Palinkas, L. A. (2010). Older adults' perspectives on successful aging. *American Journal of Geriatric Psychiatry*, *18*(7), 567–575. https://doi.org/10.1097/JGP.0b013e3181e040bb

Rowe, J. W., & Kahn, R. L. (1997). The concept of successful aging. *The Gerontologist*, *37*(4), 433–440. https://doi.org/10.1093/geront/37.4.433

Szychowska, A., Drygas, W., & Kwaśniewska, M. (2021). The role of physical activity in promoting successful aging. *Aging Clinical and Experimental Research*, *34*(6), 1209–1214. https://doi.org/10.1007/s40520-021-02037-0

Talarska, D., Tobis, S., & Kotkowiak, M. (2018). Support needs of healthy elderly individuals. *Medical Science Monitor*, *24*, 1604–1613. https://doi.org/10.12659/MSM.907032

World Health Organization. (2002). *Active ageing: A policy framework*. Geneva, Switzerland: World Health Organization. https://apps.who.int/iris/handle/10665/67215

World Health Organization. (2023). *Age-friendly cities and communities: A practical guide*. Geneva, Switzerland: World Health Organization. https://www.who.int/publications/i/item/9789240079945