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# Research Article

# Determinants of Successful Aging in Older Adults: A Systematic Review of Psychological, Social, and Physical Factors







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#### **ABSTRACT**

Successful aging is defined as reaching old age with a healthy physical condition, good cognitive function, and a positive and fulfilling social life. This definition is underpinned by the recognition of various psychological, social, and physical factors that can influence successful aging in older adults. The aim of this study was to elucidate the determinants of successful aging in older adults, focusing on psychological, social, and physical factors. This systematic review was conducted based on literature obtained from multiple electronic databases, including PubMed, Scopus, CINAHL, ScienceDirect, Springer Link, and ProQuest. The review followed the PRISMA guidelines and utilized criteria outlined by The Center for Review and Dissemination and the Joanna Briggs Institute for quality assessment of included studies. A total of 9 articles were analyzed. The determinants identifed for successful aging include including: Psychological factors, including optimism, self-efficacy, and psychological well-being. Social factors, such as social support, social participation, and positive interpersonal relationships. Physical factors, including physical fitness, physical activity, and a healthy diet. It is concluded that there are several psychological, social, and physical factors that influence a person's success in aging well or successful aging. By paying attention to these factors, it is hoped that the older adults can maximize their potential to achieve successful aging and maintain a good quality of life while aging.

Keywords: Determinants, older adults, successful aging

## INTRODUCTION

Growing aging populations have emerged as a significant concern in recent decades in many countries, Indonesia included. This demographic shift is primarily attributed to the increasing life expectancy and advancements in the healthcare sector. The surge in the elderly population is paralleled by an extension in life expectancy, presenting a challenge for society to create conducive environments that facilitate healthy and productive aging (Xu & Earp, 2022).

According to WHO statistics from 2015, the proportion of older individuals is increasing at a faster rate compared to any other age group, a trend observed across nearly all countries worldwide. Successful aging stands as a crucial milestone for the elderly population. It encompasses

aging conditions wherein older individuals maintain optimal health and functionality, mitigate the onset of various diseases, and sustain good cognitive function, thereby allowing them to lead meaningful, joyful lives and continue participating actively in social activities throughout their old age (Kokko & Feldt, 2018). According to Rowe & Kahn (1997) successful aging is achieved through an individual's adept management of three key characteristics or behaviors, which include: avoiding disease and disability, maintaining high cognitive and physical function, and actively engaging with life. Based on research conducted by (W. Lee et al., 2020) showed that in avoiding disease and disability factors, elderly couples tend to experience decreased physical function, such as muscle strength and balance which increases the incidence of falls and injuries. In the high cognitive and physical function factor, elderly couples lack social support from family, friends, or the community to maintain their cognitive and physical function. Then on the engagement with life factor, elderly couples get less emotional support which makes them less motivated and involved in social activities. If successful aging is not achieved, it will have a negative impact on the well-being of the elderly and can increase the burden on the country's economy due to increased health and long-term care costs.

The elderly population aged > 65 years in the world by 7% in 2000 and is projected to continue to increase in 2050 by 26% or reach 365 million people (Liao et al., 2020). Counting on these data, it is estimated that only 10.4% to 47.2% of the elderly are able to achieve successful aging (Rolfson, 2020). Based on the results of previous studies, it was found that the low achievement of Successful Aging in the elderly is caused by several factors including 1) High mental health such as depression, anxiety and social isolation; 2) unhealthy lifestyles such as lack of physical activity and unbalanced diet; and 3) lack of social support and social interaction (Medawati et al., 2020).

Successful aging is a concept that involves achieving optimal quality of life, good health, and independence in living in old age (Chang et al., 2021). Basically, successful aging involves physical, psychological, social, and environmental aspects. However, the factors that influence successful aging in older adults still need to be better understood. Successful aging is important for older adults. Identifying factors that are positively associated with successful aging is of great interest to individuals and society. This study aims to analyze the factors contributing to successful aging in older adults.

#### MATERIAL AND METHODS

#### **Study Design**

This research design was a systematic review conducted by synthesizing relevant research articles regarding the analysis of factors associated with successful aging in older adults using the Preferred Reporting Items for Systematic Reviews and Meta-Analyzes (PRISMA) checklist as the evaluation and determination of the study's completion. This study did not conduct a quantitative data meta-analysis.

#### **Search Strategy**

The data used in this study were secondary data derived from the findings of previous research, not from direct observation. Credible national and international journal articles with predetermined topics were obtained from the PubMed, Scopus, CINAHL, ScienceDirect, Springer Link, and ProQuest databases in March of 2023. We conducted article searches using keywords "Successful Aging" AND "Older Adults" OR "Elderly" AND "Risk Factors" OR "Psychological Factors" OR "Social Factors" OR "Physical Factors" OR "Determinants".

# **Study Identification**

The literature search based on publication restrictions between 2010-2020 with the keywords mentioned in the search strategy and resulted in 3,329 matching articles. The examined search results were then compared for duplication; 359 identical articles were found and eliminated, leaving 2970 articles. Then, the researcher filtered the articles based on modified titles that fit the research topic; 2,818 articles were omitted because they did not fit, leaving 152. The evaluation of the feasibility of 152 articles based on the overall manuscript and compliance with the feasibility criteria resulted in 9 articles that were eligible for inclusion in the systematic review (Figure 1).

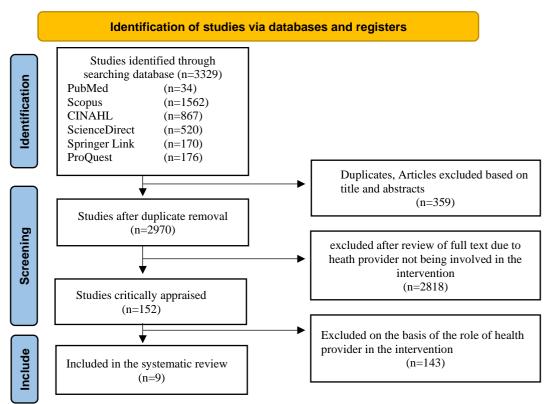


Figure 1. PRISMA Diagram Flow

# **Risk Of Bias**

The Joanna Briggs Institute's (JBI) Critical Appraisal was used to analyze and prevent the risk of bias in this study for several categories of studies: quasi-experimental studies and randomized control and trial (RCT). The ratings for criteria were "yes," "no," "unclear," or "not applicable." If at least fifty percent of the studies met the critical appraisal criteria at a predetermined cutoff point, they were included in the inclusion criteria

#### RESULTS AND DISCUSSION

# **Study Characteristics**

According to the nine articles analyzed, the total number of older adult respondents was 5.715 (table 2). Six articles employed a qualitative research design, whereas two employed a cross-sectional design. The average age of the study's respondents ranged from 64 to 85,2 years which is the majority of participants were older than sixty. There were more female participants than male participants. The majority of investigations were conducted on the Asia.

**Table 2. Characteristics of included studies** 

A4 \$7	Table 2. Characteristics of included studies					
Autors, Year	- Cross-sectional	Outcome  Healthy aging is associated with modifiable	Physical activity			
Arroyo-quiroz et al., (2020) Mexico	- Cross-sectional - N: 1.845 participants - Age: 63 – 77 years old	Healthy aging is associated with modifiable lifestyle factors, including physical activity, depression, and body weight. Healthy aging is related to maternal longevity. this research findings suggest that behavioral factors have a significant impact on healthy aging and longevity.	Physical activity, depression, and body weight			
Manasatchakun et al., (2016) Thailand	<ul> <li>Cross-sectional</li> <li>N: 453 participants</li> <li>Age: ≥ 60 years old</li> </ul>	Comparing Western and Asian countries in terms of the effects of sociodemographic factors, health status, and perceived meaning in life on perceived health and healthful aging revealed both differences and similarities. Consideration of healthful aging in northeastern Thailand should begin with an understanding of these factors. In addition, the present study is the initial step in identifying the most influential determinants of health perception and optimal aging. In fact, despite the fact that the final model explained only 24.30% of the variance in HAI scores, the current findings contribute to our understanding of how region of residence, disability, and marital status are related to perceived health and healthy aging in northeastern Thailand.	Religious activity, being married, income level, high perceived meaningfulness			
Lee et al., (2020) Taiwan	<ul><li> Qualitative research</li><li> N: 18 participants</li><li> Age: &gt; 50 years old</li></ul>	The incidence of successful aging is 14.5 percent. Significant antecedents of successful aging were younger age, female gender, higher education, weekly exercise, greater life satisfaction, nonsmoking, and alcohol consumption.	Age, gender, education, exercise, satisfaction with life, non-smoking, and alcohol consumption			
J. E. Lee et al., (2017) USA	<ul> <li>Qualitative research</li> <li>N: 11 participants</li> <li>Age: &gt; 60 years old</li> </ul>	The 4-factor solution fitted the data adequately: proactive engagement, wellness resources, positive spirit, and valued relationships.	Proactive participation, wellness resources, a positive attitude, and cherished relationships ages, gender, anemia, poor sleep quality, and obesity			
Philippines	<ul> <li>Qualitative research</li> <li>N: 15 participants</li> <li>Age: &gt; 60 years old</li> </ul>	Five phases: striving, remotivating, reforming, reintegrating, and maintaining. The study's findings serve as the impetus for structural and procedural adjustments in prison, with the goal of providing an environment conducive to successful aging; and appropriate recognition for the efforts of the elderly to achieve successful aging.	Physical Mental/Cognitive Social			
Tkatch et al., (2017) USA	<ul> <li>Qualitative research</li> <li>N: 32 participants</li> <li>Age: 65 – 85 years old</li> </ul>	This study provided the opportunity for older adults to discuss their health, how they perceived their health, and how best to acclimate to future changes. Older adults can be healthy and active regardless of their conditions or maladies because they have strong social and psychological resources and coping mechanisms, and they value their ability to care for themselves.	Good physical health, high cognitive and physical capacity, social support, and active participation in life.			

		Successful aging could be promoted by interventions or programs that address their requirements holistically, integrating psychological and social components.	
Zanjari et al., (2016) Iranian	<ul> <li>Qualitative research</li> <li>N: 37 participants</li> <li>Age: &gt; 60 years old</li> </ul>	This study adds new components to successful aging, including "subjective financial security," "avoidance of negative labeling," "acceptance of the social role of the elderly in society," and "religiosity," as well as "be generous," "contentment," "sense of being fulfilled/generativity," "tolerate," "have inner peace," "authority," and "honor national identity." In conclusion, this qualitative study emphasizes the significance of multidimensional and contextual perspectives for successful aging.	Social well-being, psychological well-being, physical health, spirituality and transcendence, financial security, elder-friendly environmental and social context
Thanakwang et al.,	- Qualitative research	The active aging scale for older Thai	Physical
(2014)	- N: 500 participants	individuals is comprised of multiple	Mental/Cognitive
Thailand	- Age: > 60 years old	dimensions that reflect various aspects of	Social
		active aging, such as physical, cognitive, social, and psychological health. The scale can be used to assess the level of active aging within the Thai culture. This scale can help researchers and practitioners understand, promote, and measure active aging in the Thai adult population.	
Tze Pin et al.,	- Cross-sectional	This study identified more demographic,	Demographic status,
(2011)	- N: 2.804 participant	psychosocial, and behavioral determinants,	psychosocial support,
Singapore	- Age: 55 – 65 years old	including nutrition and Spirituality, as a multidimensional construct of successful aging among Chinese elderly populations.	spirituality, and nutrition

#### DISCUSSION

This study aims to investigate multiple factors associated with successful aging among older individuals, specifically examining the roles of physical, psychological, and social factors. The findings indicate that psychological factors, such as optimism, self-efficacy, and psychological well-being, significantly influence successful aging. These results are consistent with previous research emphasizing the importance of psychological factors in the aging process. Notably, optimism plays a particularly significant role. Optimistic individuals tend to approach challenges with a positive mindset, viewing them as opportunities for growth rather than obstacles. This optimistic outlook can enhance coping mechanisms, resilience, and overall well-being among older adults (Saputra & Palupi, 2022).

Moreover, self-efficacy plays a crucial role in successful aging. Older adults who have confidence in their abilities are more inclined to engage in activities that promote physical and mental well-being. They are more likely to adopt healthy behaviors, actively seek social connections, and participate in activities that enhance their quality of life. Additionally, psychological well-being, encompassing aspects such as life satisfaction, positive emotions, and a sense of purpose, emerges as a significant predictor of successful aging. Older individuals with higher levels of psychological well-being tend to experience better overall health outcomes and a greater sense of fulfillment in their later years (Zanjari et al., 2016).

Social factors such as social support, social participation, and positive interpersonal relationships have also been shown to play an important role in successful aging. These results are

in line with research conducted Tkatch et al., (2017) which shows that social support from family, friends, and the broader community can foster a sense of connectedness and confidence among the elderly. Engaging in social participation, such as community or group activities, has been shown to enhance quality of life and psychological well-being. Positive and supportive interpersonal relationships also play a crucial role in successful aging. Actively participating in community activities allows older adults to maintain a sense of purpose, expand their social networks, and experience a heightened sense of belonging. These social interactions offer opportunities for learning, personal growth, and meaningful engagement, all of which contribute to overall well-being and successful aging. (Lucas et al., 2018).

Additionally, positive and supportive relationships with family, friends and peers can provide emotional stability, companionship and a sense of security. These relationships can also act as a buffer against stress and adversity, increasing resilience and improving overall well-being. Social support and social participation can positively influence psychological well-being, while psychological factors, such as optimism and self-efficacy, can enhance social relationships and encourage active engagement in social activities. These reciprocal relationships highlight the interdependence between social and psychological factors in successful aging.

In addition to psychological and social factors, physical factors also have an important role in successful aging. This study shows that the level of physical fitness, physical activity and a healthy diet can affect the quality of life and psychological well-being of the elderly. Maintaining good physical fitness levels can enhance mobility, independence, and overall functional ability in older adults. Engaging in regular exercise and adopting a physically active lifestyle can contribute to improved physical fitness and positively influence psychological well-being (J. E. Lee et al., (2017). Regular physical activity has been associated with reduced symptoms of depression and anxiety, improved cognitive function, and enhanced overall quality of life. Participating in activities such as walking, swimming, dancing, or engaging in strength training exercises can have a profound impact on mental well-being and successful aging (Manasatchakun et al., 2016).

A healthy diet plays a crucial role in supporting physical and consuming a balanced diet that includes adequate nutrients, vitamins, and minerals can help prevent chronic diseases, maintain optimal cognitive function, and support overall vitality. Proper nutrition can also contribute to better mood regulation and improved psychological health, ultimately enhancing the overall experience of aging (Thanakwang et al., (2014). It is important to recognize the interplay between physical, psychological, and social factors in successful aging. Physical activity and a healthy diet can promote social engagement, as they often involve participation in group activities or interactions with others. Moreover, physical well-being can positively impact psychological factors such as self-esteem, body image, and self-confidence, leading to improved overall psychological health.

## **CONCLUSION AND SUGGESTION**

In conclusion, this study highlights the importance of considering multiple factors in the context of successful aging. Psychological factors, including optimism, self-efficacy, and psychological well-being, play a significant role in promoting successful aging and overall well-being in older adults. Social factors, such as social support, social participation, and positive interpersonal relationships, are crucial determinants of successful aging, contributing to a sense of connectedness, purpose, and overall quality of life. Physical factors, including physical fitness, physical activity, and a healthy diet, also play a vital role in supporting successful aging, improving physical and psychological well-being.

To promote successful aging, it is essential to adopt a holistic approach that considers the interplay between these factors. Interventions and programs should focus on enhancing psychological well-being, fostering social connections, and promoting physical activity and healthy eating habits. This can be achieved through individual-level interventions, community-based initiatives, and policy changes that support and encourage active aging.

Ultimately, by addressing the multifaceted nature of successful aging and implementing strategies that target psychological, social, and physical well-being, we can enhance the quality of life and promote successful aging for older adults.

## **CONFLICT OF INTEREST**

The Authors declares that there is no conflict of interest.

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