

## **ANALYSIS OF FACTORS INFLUENCING SUCCESSFUL AGING IN ELDERLY OLDER WORKING AS FARMERS**

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successful aging, lifestyle, physical activity, psychological, social, spiritual

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### **ABSTRACT**

#### **Introduction**

Successful aging is an important achievement for older adults. Some older adults who work as farmers are experiencing successful aging. However, there are few studies explaining the factors that contribute to successful aging in older adults who work as farmers. The purpose of this study was to determine the factors influencing successful aging in older adults who work as farmers.

#### **Method**

This study used a correlational study with a cross-sectional approach. The population was elderly farmers in 11 sub-districts in the south-central Lamongan region. A total of 110 samples were obtained using probability sampling. The independent variables were lifestyle factors, physical activity factors, psychological factors, social factors, and spiritual factors, while the dependent variable was successful aging. Data were collected using a questionnaire and analyzed using Spearman's rho.

#### **Results**

There is a relationship between lifestyle factors ( $p=0.002$ ), physical activity factors ( $p=0.026$ ), psychological factors ( $p=0.020$ ), social factors ( $p=0.003$ ), and spiritual factors ( $p=0.001$ ) with successful aging.

#### **Conclusion**

factors, physical activity factors, psychological factors, social factors, and spiritual factors influence successful aging in elderly farmers in the south-central Lamongan region. It is hoped that elderly people will understand and make efforts to achieve successful aging through a healthy lifestyle, physical activity, a positive attitude in understanding life, being active in social life, and believing in God's intervention in life.

## **INTRODUCTION**

Elderly is the final period of life where a person experiences a progressive decline in physical and cognitive functions, resulting in an increased burden on the health system (Cho, Martin, & Poon, 2015; Ritchie, Tucker-Drob, Starr, & Deary, 2016 in Gutiérrez, Tomás and Calatayud, 2018). The decline in physical and cognitive functions can affect a person's life in old age. A successful and happy old age is the goal of the elderly development stage because

success in life (Successful aging) is the main key to supporting the survival of the elderly (Rahmawati & Saidiyah, 2016).

According to the Central Bureau of Statistics, the work of older adults affects their standard of living and well-being. Some older adults who work as farmers are experiencing successful aging, remaining healthy, active, productive, and happy with their lives. They feel needed and are not isolated from social life.

However, there are few studies examining the factors influencing successful aging in older adults who work as farmers.

According to WHO statistical data in 2015, the proportion of elderly people grew faster than other age groups, and this applies to almost all countries in the world. According to BPS data in 2015, the number of elderly people was 8.2%, while according to Susenas in 2016, the number of elderly people in Indonesia was 22.4 million people or 8.69% of the total population of Indonesia. This data shows an increase in the number of elderly people from 2015 to 2016. Lamongan Regency is one of the regencies/cities in East Java that has a fairly high number of elderly people. According to BPS, the number of elderly people in Lamongan increased from 10.52% in 2011 to 12.46% in 2015. The type of work of elderly people in East Java is mostly in the agricultural sector, which is 62.12% when compared to the industrial and service sectors, which are 9.52% and 28.32% respectively. Lamongan Regency has a higher number of elderly people working as farmers than the East Java average, namely 70.06%.

Dorris describes successful aging as a state of being free from illness. This means being physically healthy, financially secure, still productive and employed, independent in life, able to think optimistically and positively, and

still able to actively engage with others who can provide meaning and social and psychological support in one's life (Rahmawati & Saidiyah, 2016).

There are non-modifiable factors for successful aging, such as age, gender, and ethnicity. However, there are modifiable factors, such as physical activity (Pruchno & Wilson-Genderson, 2014 in Geard et al., 2017), social, psychological, cognitive, physical and health, and spiritual well-being (Rahmawati & Saidiyah, 2016). According to Gutierrez et al. (2018), factors relevant to successful aging are levels of well-being and life satisfaction.

Cheung & Wu (2012) in Cheung, Yeung, & Wu (2018) explained several factors related to successful aging among Chinese workers. They found that family conflict and organizational support significantly influenced the successful aging of working older adults. According to activity theory, older adults are considered successful if they are active and participate in many social activities.

Successful aging is crucial for older adults. Identifying factors that positively influence successful aging is of interest to both individuals and society (Bosnes et al., 2017 in Gutiérrez, Tomás, and Calatayud, 2018). This study aims to analyze factors influencing successful aging among older adults working as farmers in Lamongan.

## **MATERIALS AND METHODS**

The design of this research is descriptive correlational with a cross sectional approach.

### **POPULATION, SAMPLE & SAMPLING**

The population in this study were elderly people who worked as farmers in 11 sub-districts in South Central Lamongan consisting of Kedungpring, Babat, Sukodadi, Pucuk, Lamongan, Deket, Tikung, Sugio, Maduran, Sarirejo, and Kembangbahu sub-districts with a total population of 110 samples obtained by probability sampling. The selection of villages in each sub-district was determined randomly. The study was conducted on May 19-June 18, 2019. The inclusion criteria were elderly people who could read and/or communicate well, and were in good health when the study was conducted. The exclusion criteria were elderly people who were not at the research location

when the study was conducted, and elderly people who had more than one type of job.

### **RESEARCH VARIABLES & INSTRUMENTS**

The variables in this study consist of lifestyle factors, physical activity factors, psychological factors, social factors, spiritual factors (independent variables), and successful aging (dependent variables). This study used a questionnaire consisting of 5 parts. First, a demographic data questionnaire consisting of age, gender, religion, occupation and address. Second, a lifestyle, psychological, and spiritual questionnaire consisting of 15 questions and is a modified questionnaire from a previous study entitled "Analysis of Factors Related to Quality of Life of Elderly Hypertensives" by Lavita Kirana Devi (2017) for lifestyle and

psychological factors, and a modification of the daily spiritual experience scale DSES by Lynn G. Underwood for spiritual factors. Third, a social questionnaire consisting of 6 questions and is the LSNS-6 (Lubben Social Network Scale) questionnaire by J. Lubben (2009). Fourth, a physical activity questionnaire consisting of 15 questions and is a modified questionnaire from a previous study entitled "Analysis of Factors Related to Quality of Life of Elderly Hypertensives" by Lavita Kirana Devi (2017) for lifestyle and psychological factors, and a modification of the DSES daily spiritual experience scale ...

is a PAR questionnaire by FAO/WHO/UNU (2001). Fifth, the successful aging questionnaire containing 14 questions and taken from the successful aging scale questionnaire developed by Gary T. Raker (2009). ANALYSIS The analysis used was Spearman Rank Correlation with a significance level of <0.05. ETHICS This research was declared to have passed the ethical review and received an Ethical Approval certificate with No: 1424-KEPK issued by the Health Research Ethics Committee of the Faculty of Nursing, Airlangga University on May 22, 2019.

**RESULTS**

**HASIL PENELITIAN**

Tabel. 1 Karakteristik Responden

Karakteristik Responden	Kriteria	f	%
Jenis Kelamin	Laki-laki	58	52,7
	Perempuan	52	47,3
	<b>Total</b>	<b>110</b>	<b>100</b>
Usia	<i>Elderly</i> (60 –74 th)	104	94,5
	<i>Old</i> (75- 90 th)	6	5,5
	<i>very old</i> (> 90 th)	-	0
	<b>Total</b>	<b>110</b>	<b>100</b>

Distribution data shows that the gender ratio of male respondents is higher than female respondents, namely 52.7% (58 respondents). The data also shows that the majority of

respondents are aged 60-74 years (elderly), namely 94.5% (104 respondents), with an average respondent age of 65 years.

Tabel. 2 Uji statistik analisis faktor yang mempengaruhi *successful aging*

Variabel	Kategori	<i>Successful aging</i>				Total	
		Sedang		Tinggi		N	%
		f	%	F	%		
Faktor gaya hidup	Rendah	3	2,7	1	0,9	4	3,6
	Cukup	26	23,6	19	17,3	45	40,9
	Baik	19	17,3	42	38,2	61	55,5
	Jumlah	48	43,6	62	56,4	110	100
		p = 0,002		r = 0,288			
Faktor aktivitas fisik	Ringan	7	6,4	3	2,7	10	9,1
	Sedang	29	26,4	33	30	62	56,4
	Berat	12	10,9	26	23,6	38	34,5
	Jumlah	48	10,9	62	56,4	110	100
		p = 0,026		r = 0,212			
Faktor psikologis	Cukup	4	3,6	0	0	4	3,6
	Baik	44	40	62	56,4	106	96,4
	Jumlah	48	43,6	62	56,4	110	100
		p = 0,020		r = 0,221			
Faktor sosial	Beresiko isolasi sosial	14	12,7	5	4,5	19	17,3
	Tidak beresiko	34	30,9	57	51,8	91	82,7
	Jumlah	48	43,6	62	56,4	110	100
		p = 0,003		r = 0,277			
Faktor spiritual	Kurang	26	23,6	15	13,6	41	37,3
	Baik	22	20	47	42,7	69	62,7
	Jumlah	48	43,6	62	56,4	110	100
		p = 0,001		r = 0,307			

The results of statistical tests with Spearman Rho showed  $p = 0.002$  and  $r = 0.288$  for lifestyle factors,  $p = 0.026$  and  $r = 0.212$  for physical activity factors,  $p = 0.020$  and  $r = 0.221$  for psychological factors,  $p = 0.003$  and  $r = 0.277$  for social factors, and  $p = 0.001$  and  $r =$

## DISCUSSION

### Lifestyle

Most elderly farmers in Lamongan who have a healthy lifestyle also have a high rate of successful aging. This is in line with research conducted by Canêdo et al., (2018) which states that lifestyle determinants/factors have a significant impact on successful aging. Research conducted by Rahmawati & Saidiyah (2016) explains that a healthy lifestyle can maintain the physical condition and health of the elderly. According to WHO (2002), doing physical activity, eating healthy foods, not smoking and drinking alcohol, and using medication wisely in old age can prevent disease and functional decline, prolong life and improve quality of life. The lifestyle components used are health checks, diet and food intake, smoking, and exercise.

Adopting a healthy lifestyle and actively participating in care is crucial. Adopting a healthy lifestyle can help prevent disease and disability. Avoiding disease and disability is one of three key characteristics or behaviors that influence successful aging, according to Rowe and Khan (Canêdo et al., 2018). Disabilities prevent older adults from achieving their goals of healthy aging and active aging (Nurhayati & Cahyati, 2016).

Management of decreased bodily function can begin with routine health check-ups as a preventative measure. Through health check-ups, seniors will be aware of the risks of disease and disability. Research conducted by Trihandini (2007) using a cohort design in 13 provinces in Indonesia from 1993 to 2002 found that regular health check-ups can maintain seniors' active lifestyles (Nurhayati & Cahyati, 2016).

Elderly people need to maintain a healthy and balanced diet. According to Munawirah, Masrul, & Martini (2017), nutritional status has a major impact on the onset of disease in old age. Olin (2005) in Munawirah et al. (2017), explains that malnutrition affects functional status in old age. Elderly people also need to avoid smoking. According to Ibrahim (2012), smoking can increase the workload of the heart and raise blood pressure. In addition, smokers

0.307 for spiritual factors. The results of the study showed that there was a relationship between lifestyle factors, physical activity factors, psychological factors, social factors and spiritual factors with successful aging in elderly who work as farmers.

will experience changes in lung function with various clinical symptoms. Disease and decreased functional status hinder the achievement of successful aging in the elderly .

Most elderly farmers in Lamongan don't exercise, even though exercise has many health benefits. According to Prasetyo (2013), physiologically, exercise can be beneficial in improving fitness and health, and enhancing physical components such as heart and lung function, agility, speed, and strength. Socially, exercise can be used as a medium Socialization through interaction and communication with other people or the surrounding environment. The benefits of exercise can support the achievement of successful aging in the elderly.

### Physical activity

Most elderly farmers in Lamongan with moderate physical activity have a high likelihood of successful aging. This is in line with research by Gutiérrez et al. (2018) which states that physical activity and satisfaction directly influence successful aging. Research conducted by Rahmawati & Saidiyah (2016) states that one factor influencing the success of elderly is activity. Gopinath et al. (2018) states that elderly with higher levels of physical activity have twice the chance of successful aging compared to elderly with lower levels of physical activity.

Elderly farmers in Lamongan spend an average of 6-7 hours sleeping, 1.5 hours sitting, 5-6 hours gardening, 1 hour doing housework, and 2 hours of leisure time. According to Sulandari, Martyastanti, & Mutaqwarohmah (2019), elderly people who enjoy their old age by engaging in activities appropriate to their physical condition and continuing to interact with their environment will feel valued, more enthusiastic, and passionate about life.

Several studies have shown that physical activity reduces the risk of many chronic diseases and prolongs life (Gopinath et al., 2018). Furthermore, physical activity is also known to prevent cognitive decline in the elderly. This is supported by Kirk-Sanchez & McGough (2013) in Sauliyusta & Rekawati (2016), who found that physical activity stimulates the brain, increasing the production of a protein called Brain-Derived Neurotrophic Factor (BDNF). This BDNF protein plays a crucial role in keeping nerve cells fit and healthy. When seniors are in good physical and mental health, they are more likely to feel satisfied and happy with their lives, which contributes to successful aging.

While high levels of physical activity do increase the likelihood of successful aging in older adults, activity must be tailored to their abilities. Excessive activity can negatively impact their health. Jeffry Tenggara (2009), cited in Suryanto (2010), states that physical activity has positive health benefits, but inappropriate physical activity can pose greater risks than benefits.

### Psychological

Most elderly farmers in Lamongan who have good psychological well-being have a high rate of successful aging. Research conducted by Rahmawati & Saidiyah (2016) revealed that psychological factors are one of the factors influencing success in old age. According to Utomo et al. (2018), there is a link between quality of life and psychological well-being in successful aging.

Psychological well-being is one dimension that supports the achievement of successful aging, this is related to feelings of happiness and satisfaction with life (Raker, 2009 in Utomo et al., 2018). The psychological well-being of elderly farmers is related to elderly activities where the elderly are actively involved in social and productive activities in old age, thus giving rise to feelings of satisfaction, happiness, and meaning.

Elderly farmers in Lamongan tend to have good psychological well-being, particularly in terms

of self-acceptance. Good self-acceptance allows seniors to positively address their strengths and weaknesses. Self-acceptance can influence job satisfaction. elderly life. Suardiman (2011) stated that strengthening self-concept, which can increase self-acceptance and achieve expectations, as well as accepting any changes that contribute to life satisfaction, are factors that influence successful aging. Research by Firlianda (2017) found that successful aging among seniors living in villages was higher in self-actualization indicators. Self-acceptance is a key characteristic of self-actualization.

Psychological factors relate to the positive attitude older adults have in interpreting life, and recognizing their shortcomings can foster optimism. When older adults have a positive outlook on life, they are more likely to experience successful aging. This is because when older adults have a positive outlook on life, they accept everything they have, leading to feelings of satisfaction, happiness, and value in their lives.

### Social

Most elderly farmers in Lamongan who are not at risk of social isolation have a high rate of successful aging. This is in line with research conducted by Canêdo et al. (2018), which states that social factors have a significant impact on successful aging. According to research by Gutiérrez et al. (2018), social aspects have an indirect effect on successful aging. Another study by Rahmawati & Saidiyah (2016) states that one factor influencing the success of the elderly is social factors.

Participating in social activities can be considered an effort to prevent disease and disability. According to the WHO, older adults who experience loneliness and social isolation increase the risk of disability and death.

Elderly farmers have strong social connections and involvement, both with family and friends. This demonstrates their trust in their social environment and the positive response from

their social environment, especially from family and friends. This fosters a sense of support and care for them.

Social support is essential for seniors, especially in dealing with the various challenges that arise in old age. High-quality relationships, social support, and enjoyable friendships can influence successful aging (Suardiman, 2011). More specifically, social support from family and the community is a social indicator of successful aging (Hamidah & Wrastari, 2012). Social support makes seniors feel that many people care about them and help them solve their problems, thus reducing the likelihood of stress-related illnesses. Furthermore, seniors who remain active in their social lives will feel loved and appreciated by those around them, leading to a sense of happiness and life satisfaction.

### Spiritual

Most elderly farmers in Lamongan who have a good spirituality have a high rate of successful aging. This is in line with research conducted by Rahmawati & Saidiyah (2016), which states that one factor influencing the success of elderly people is religiosity. Research by Utami (2012) revealed that religiosity plays a role in managing stress and providing direction, support, and hope. Elderly people who believe

in the existence of God and believe in God's intervention in their lives will assume that all problems they face come from God and Surrender all life's problems to God.

Believing in God's intervention in all aspects of life will enable older adults to adapt to the changes and challenges they experience, fostering a positive attitude. The spiritual well-being of older adults also influences their social lives. According to Adegbola (2006) in Yuzefo, Sabrian, & Novayelinda (2015), older adults with a strong spiritual understanding will experience positive relationships with others, enabling them to find meaning and purpose in life. This can help them reach their potential and improve their quality of life.

A mature sense of spirituality and faith makes older adults feel satisfied with their lives, which is expressed through gratitude. Yuzefo et al. (2015) stated that religion and spirituality are sources of coping for older adults when experiencing sadness, loneliness, and loss. Elderly individuals with good/adaptive coping will have a high rate of successful aging, as adaptive coping allows them to engage in positive activities to address the challenges they face.

## CONCLUSION

Elderly people who have a good lifestyle, do physical activities, have good psychology, are actively involved in social life, and elderly people who have good spirituality tend to have high levels of successful aging among elderly farmers in Lamongan. Seniors need to understand the steps they need to take to

achieve successful aging. They can gain knowledge through participation in various outreach programs and actively seeking information. Furthermore, seniors must optimize all aspects of their lives to achieve successful aging by adopting a healthy lifestyle, engaging in physical activity, maintaining a positive attitude toward life, being socially active, and believing in God's intervention in their lives.

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