



Relationship Between Self-Efficacy and Independence in Performing Activities of Daily Living Among the Elderly

Fany Fadilla¹, Sondang Ratnauli Sianturi^{2*}

Sekolah Tinggi Ilmu Kesehatan Sint Carolus, Indonesia

Email: sondangrsianturi@gmail.com

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A B S T R A C T

The rapid growth of the elderly population in Indonesia has increased the demand for long-term care and support, particularly in institutional settings. Maintaining independence in activities of daily living is a critical determinant of quality of life among older adults. Psychological factors, especially self-efficacy, play a pivotal role in sustaining functional independence. This study aimed to examine the relationship between self-efficacy and the level of independence in performing ADL among older adults residing in a social care institution. A quantitative, descriptive-correlational study with a cross-sectional design was conducted among 66 older adults living at PSTW Budi Mulia 2 Cengkareng, Jakarta. Participants were selected using purposive sampling. Self-efficacy was measured using the Indonesian version of the General Self-Efficacy Scale, while ADL independence was assessed using the Barthel Index. Data were analysed using the Chi-square test with a significance level of $p < 0.05$. The majority of participants demonstrated high self-efficacy (95.4%) and were independent in ADL (96.9%). A statistically significant association was found between self-efficacy and ADL independence ($p < 0.05$). Older adults with high self-efficacy were significantly more likely to perform daily activities independently than those with low self-efficacy. Self-efficacy is significantly associated with functional independence among institutionalized older adults. Strengthening self-efficacy through structured physical, psychological, and social interventions may contribute to sustaining independence and improving quality of life in elderly care institutions.

1. Introduction

Population aging is a global phenomenon with profound implications for health systems, social structures, and economic sustainability (WHO, 2025). By 2050, the global population aged 60 years and older is projected to exceed two billion, with the most rapid growth occurring in low and middle-income countries. Indonesia is undergoing a rapid demographic transition, with older adults accounting for 11.75% of the total population in 2023 (Statistik, 2023).

As longevity increases, geriatric care has shifted from survival-oriented approaches toward maintaining functional ability and quality of life. Functional decline is among the most significant challenges of aging, often resulting in dependency, institutionalization, and increase health care utilization. Consequently, preserving independence in daily functioning has become a central goal of gerontological nursing and public health policy.

Activities of Daily Living (ADL) include basic self-care tasks such as bathing, dressing, toileting, transferring, continence, and feeding. ADL independence is widely recognized as a key indicator of functional health and quality of life in older adults (Motamed-Jahromi & Kaveh, 2021). Declines in ADL performance are associated with increased morbidity, mortality, depression, and institutional dependency.

While physical decline is a hallmark of aging, psychological factors substantially influence how older adults adapt to functional limitations. Self-efficacy, defined as an individual's belief in their capacity to execute actions required to manage situations, is a central construct in Bandura's social cognitive theory. High self-efficacy is associated with increased motivation, persistence and engagement in health-promoting behaviors. Among older adults, self-efficacy has been linked to better mobility, reduced fear of falling (Susilowati et al., 2019), higher physical activity levels and improves ADL performance (Alfyanita et al., 2016; Clegg et al., 2011). Conversely, low self-efficacy contributes to activity avoidance, dependency and accelerated functional decline (Farmer et al., 2022).

Older adult residing in institutional setting face unique challenges, including reduced autonomy, social isolation, and limited family interaction. Given Indonesia's rapidly aging population and growing reliance on institutional care, understanding psychological determinants of independence in this context is essential. Therefore, this study aimed to examine the relationship between self-efficacy, and ADL independence among older adults residing in PSTW Budi Mulia Cengkareng.

2. Methodology

Study Design

This study employed a quantitative descriptive-correlational design with a cross-sectional approach. This design was chosen to examine the association between self-efficacy and ADL independence at a single point in time without manipulating variables.

Study Setting

The study was conducted at PSTW Budi Mulia 2 Cengkareng, a government-operated social care institution for older adults in Jakarta, Indonesia. The institution provides residential care, health services, physical activity programs, and social activities for elderly residents.

Participants and sampling

The Study population consisted of 150 older adults residing at the institution, inclusion criteria were: (1) age 60 years or older, (2) ability to communicate verbally, (3) stable physical condition, and (4) willingness to participate. Exclusion criteria included severe cognitive impairment or acute illness that could interfere with data collection. A total of 66 participants were selected using purposive sampling based on the inclusion criteria. This sampling technique was considered appropriate given the specific characteristics required for participation.

Instruments

Self-efficacy was measured using the General Self-Efficacy Scale (GSE), which had been translated and validated in Indonesian populations. The scale consists of 10 items rated on a Likert scale and demonstrated excellent reliability in this study (cronbach's alpha = 0.90). Independence in ADL was assessed using the Barthel Index, which evaluates ten functional domains related to self-care and mobility. The Barthel Index has been widely used in geriatric research and demonstrated good internal consistency in this study (cronbach alpha = 0.84).



Data Collection Procedure

Data were collected through structured face-to-face interviews conducted by trained researchers. Interviews were carried out in a private and comfortable setting within the institution to ensure participant confidentiality and comfort. Each interview lasted approximately 20-30 minutes.

Data analysis

Data were analyzed using SPSS software. Descriptive statistics were used to summarize participant characteristics and variable distributions. The Chi-square test was applied to examine the association between self-efficacy and ADL independence. Statistical significance was set at $p < 0.05$.

3. Result and Discussion

Participant characteristics

Table 1. Participant characteristic

Characteristic	Category	n	%
Age	60-69 years old	40	60,6
	70-79 years old	25	37,8
	≥ 80 years old	1	1,5
Gender	Male	36	54,5
	Female	30	45,4
Education level	Did not attend school – Completed elementary school	33	50
	Completed Junior high school/High School Completed	27	40,9
	Bachelor's/ Master's/ Doctoral Degree	6	9

Most participants were aged 60-90 years (60,6%), followed by those aged 70-79 years (37,8%), and ≥ 80 years (1,5%). The majority were male (54,5%). Regarding educational background, 50% had completed elementary school or less, 40,9% had secondary education, and only 9% had higher education.

Table 2. Levels of Self-efficacy and ADL Independence

Category	n	%
Self-efficacy		
Low	3	4,5
High	63	95,4
Level Independence		
Dependent	2	3,0
Independent	64	96,9

The majority of participants exhibited high self-efficacy (95,4%), while only a small proportion demonstrated low self-efficacy (4,5%). Similarly, most participants were independent in ADL (96,9%), with only 3,1% categorized as dependent. High levels of independence were observed in basic self-care activities such as feeding, dressing and personal hygiene. Activities requiring greater physical effort and balance, such as stair climbing, posed challenges for a small number of participants (Park et al., 2025).

Relationship between Self-efficacy and ADL independence

Table 3. Relationship between Self-efficacy and ADL independence

Self-efficacy	Independence Level				Total	P-value	
	Dependent		Independent				
	n	%	n	%			
Rendah	2	63,7	1	36,3	3	100	0.001
Tinggi	0	0	63	100	63	100	
Total	2	3,1	64	96,9	66	100	

Chi-square analysis revealed a statistically significant association between self-efficacy and ADL independence. All participants with high self-efficacy were independent in ADL, whereas participants with low self-efficacy were more likely to be dependent. These findings indicate that self-efficacy is strongly associated with functional independence among institutionalized older adults.

Discussion

This study demonstrates a significant relationship between self-efficacy and independence in Activities of Daily Living (ADL) among older adults residing in an institutional care setting. Older adults with high self-efficacy were substantially more likely to maintain functional independence, supporting the theoretical proposition that psychological beliefs play a crucial role in shaping functional outcomes in later life.

Self-Efficacy and ADL Independence

The findings revealed that 95,4% of respondents had high self-efficacy, and 96,9% were categorized as independent in performing ADL. High self-efficacy among participants may be attributed to internal factors such as long-term life experiences, positive cognitive appraisal, and established coping mechanisms. Individuals with high self-efficacy tend to remain motivated and persistent when facing physical challenges, whereas those with low self-efficacy are more likely to experience helplessness and withdrawal.

Independence in ADL is a critical determinant of quality of life among older adults (Karlsson et al., 2016). Most participants were able to perform essential activities such as eating, dressing, and personal hygiene independently. However, tasks requiring greater physical strength and balance, such as climbing stairs, remained challenging for some residents. This finding suggests that although overall independence is high, targeted physical interventions are still necessary. The high level of independence observed at PSTW Budi Mulia 2 may also be attributed to institutional programs, including routine physical exercise, social activities and continuous supervision by care staff. These programs promote physical fitness, social engagement, and emotional support, which collectively reinforce independence and self-efficacy (Lampu et al., 2021; Li et al., 2017; McCreedy et al., 2018).

International studies conducted in high-income countries consistently report similar findings. Research from the United States and Canada has shown that self-efficacy predicts ADL and instrumental ADL performance independently of physical health status. Longitudinal studies suggest that self-efficacy buffers the negative impact of age-related physical decline by sustaining motivation and activity engagement. In European countries, particularly in Scandinavia, institutional care models emphasize rehabilitation and autonomy. Studies from Sweden and Norway indicate that self-efficacy mediated the relationship between physical capacity and functional independence, with residents who perceive greater control over their abilities demonstrating better ADL outcome (Li et al., 2017).

Relationship between self-efficacy and ADL independence

Statistical analysis showed a significant relationship between self-efficacy and ADL independence ($p < 0.001$). All respondents with high self-efficacy were classified as independent, while those with low self-efficacy were more likely to be dependent. These findings align with previous studies demonstrating that higher self-efficacy is associated with better functional outcomes among elderly populations.

Bandura's theory explains that individuals with high self-efficacy are more willing to engage in challenging tasks, sustain motivation, and persist despite difficulties. In the context of aging, confidence in one's abilities plays a vital role in maintaining autonomy. Environmental support, such as structured activities and encouragement from healthcare professionals, further strengthens self-efficacy and functional independence. Nevertheless, a small proportion of elderly individuals with low self-efficacy require special attention. Psychosocial interventions, including group therapy, peer support, and empowerment-based programs, may be effective strategies to enhance self-efficacy and prevent functional decline in this vulnerable group (Berghlund et al., 2013; Guo et al., 2022; Laosa et al., 2025).

4. Conclusion

Self-efficacy is significantly associated with independence in activities of daily living among institutionalized older adults in Indonesia. Older adults with stronger beliefs in their ability to perform daily tasks are more likely to maintain functional independence despite age-related challenges. Therefore, strengthening self-efficacy through integrated physical, psychological, and social interventions should be prioritized in institutional elderly care to promote healthy aging and enhance overall quality of life.

Future research is recommended to employ longitudinal or experimental designs to examine causal relationships and evaluate the effectiveness of targeted interventions aimed at improving self-efficacy and functional independence among older adults across diverse care settings.



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