# Perspective Review: The Influence of Gait Efficacy on Improving Physical Activity in Community-Dwelling Older Adults

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Ageing is associated with a rise in the prevalence of inactivity. The COVID-19 pandemic was also reported to be related to physical functioning and fall outcomes, with the most significant effect on individuals with reduced physical activity and social. Therefore, the elderly, as the most populous group vulnerable, need serious attention. Gait efficacy is defined as an individual's perception of their level of confidence in order to perform safe walking tasks. Increasing older adults' gait-related self-efficacy is necessary to promote self-regulation of physical activity and initiate the development of good physical activity habits as early prevention of disuse syndrome or inactivity in older adults.

## Introduction

Progressive ageing is associated with increased inactivity rates, mainly since 1 in 2 older women do not engage in regular physical activity compared to 1 in 3 older men (Halter et al., 2017). In addition, the long-lasting Covid-19 pandemic has resulted in reduced physical activity and social isolation in older adults due to activity restrictions, leading to reduced physical and psychological function and impacts on fall outcomes (Hoffman et al., 2022). Therefore, serious attention needs to be paid to older adults.

Environmental factors, as well as psychological factors, determine the manner and amount of physical activity throughout life. As Bandura has presented, self-efficacy is related to performance achievement. Self-efficacy is an individual's confidence in how well He or She can perform the actions necessary to produce a certain result (Bandura, 2002). Decreased self-efficacy for walking causes fear of falling, resulting in a spiral relationship in which voluntarily restricting the amount of activity causes a decrease in muscle strength and balance ability and a reduction in walking ability. However, the literature that informs the role of self-efficacy in physical activity still needs to be improved. Increasing gait efficacy in older adults may improve their psychological and bodily functions and reduce the risk of decline due to voluntary activity restriction. In this review, the author takes a perspective on the relationship between gait efficacy and physical activity.

## Self-Efficacy

Activities are not only influenced by environmental factors but also influenced by and psychologically affected by psychological factors; Psychological factors determine the manner and amount of physical activity throughout life (Halter et al., 2017). As Bandura has shown, self-efficacy or confidence in the ability to perform a particular action is shaped by the achievement of performance, and the expectation of effectiveness precedes the execution of the action and when and when the action is performed. Self-imposed activity restrictions further reduce perceived abilities over

time, affecting the development of fear of falling and disuse syndromes (e.g., reduced muscle strength, balance ability, and range of motion) (Bazzucchi et al., 2005; Halter et al., 2017). Fear of falling reduces activity, which causes disuse syndrome, affecting the deterioration of walking and activity ability. Therefore, increasing walking-related self-efficacy in older adults may increase the amount of activity, improving mental and physical functions and reducing the risk of falling. Evidence suggests that self-efficacy plays a role as a potential mediator of the association between physical activity, functional performance, and functional limitations in older adults.

**Gait Efficacy**

Gait efficacy is defined as an individual's perception of their level of confidence in order to perform safe walking tasks or self-efficacy of walking in a range of different settings (Newell et al., 2012). Some research articles report high scores of gait efficacy in healthy, community-dwelling older adults (Okura, 2021; Özden, 2022; Weijer, 2022). However, some evidence showed that older adults with osteoarthritis and low back pain have low gait efficacy (Okura, 2021; Williamson et al., 2021). Further, gait efficacy is becoming an intermediate factor that affects physical activity, physical function performance, and functional limitation. It is suggested that there is an association between physical activity, functional limitation, and gait efficacy (Mcauley et al., 2006). Increasing older adults' gait-related self-efficacy has the potential to improve their function and lessen their risk of decline due to self-imposed activity restrictions may be possible. Therefore, further research is needed in terms of gait efficacy, and the development of a relation model between gait efficacy and the amount of physical activity may be necessary to promote self-regulation of physical activity and initiate the development of good physical activity habits as early prevention of disuse syndrome or inactivity on the older adult.

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