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**Stretching One's Limits:
The Development of Self-Efficacy in a Senior
Yoga Community**

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Stretching One's Limits: The Development of Self-Efficacy in a Senior Yoga Community

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Abstract

This paper provides scholarly analysis of extant literature regarding the role of self-efficacy in determining behavior change among older adults engaging in the physical activity of yoga. As adults age, they experience physical, social and mental changes that are often difficult to accept and overcome. Due to the physiological changes that occur in the aging process, many older adults experience physical and cognitive limitations, which prevent them from being able to engage in physical activity and retain a sense of independence to perform daily activities and make decisions for themselves. Implications of losing independence and the ability to make decisions deeply impact older adults' self-efficacy beliefs. Therefore, the present literature review has examined existing scholarship that demonstrates the benefits of engaging in physical activity to regain a sense of agency and enhance self-efficacy beliefs among older adults, aiding them in overcoming the physical and cognitive limitations that may prevent them from exercising.

Keywords: Older adults, Self-efficacy, Yoga.

The Development of Self-efficacy in a Senior Yoga Community

This paper provides scholarly analysis of extant literature regarding the role of self-efficacy in determining behavior change among older adults engaging in the physical activity of yoga. Psychologists identify self-efficacy, the belief in an individual's ability to succeed in a specific situation (Bandura 1997), as a key determinant in behavior change. The literature suggests that self-efficacy beliefs positively influence older adults perceived ability to engage in physical activity despite facing functional limitations (McAuley et al. 2007). As adults age, they experience physical, social and mental changes that are often difficult to accept and overcome (Nelson et al. 2007). Due to the physiological changes that sometimes occur as a result of the aging process, older adults experience physical and cognitive limitations, which prevent them from being able to engage in physical activity as well as retain a sense of independence to perform daily activities and make decisions for themselves. Implications of losing independence and the ability to make decisions deeply impact older adults' self-efficacy beliefs.

Age is a primary risk factor for the development and progression of chronic disease among older adults, and therefore a challenge in the health care industry (Chodzko-Zajko et al. 2009). The most common health risk factors facing many older adults are obesity, hypertension and diabetes (Sieck 2003). Additionally, older adults face challenges due to health related issues of physical and cognitive decline associated with the aging process (Sieck 2003). Natural occurrences in the aging process, such as sarcopenia, result in the degenerative loss of muscle mass and strength (Sieck 2003). Due to this physiological change, many older adults experience extreme physical functional limitations, which prevent them from being able to remain independent. Implications of disability and losing independence to perform daily activities can make older adults fearful, angry, guilty or confused (Gabriel and Bowling 2004).

Maintaining one's health into older adulthood was found to preserve independence among aging individuals (Gabriel and Bowling 2004), improve functional performance (McAuley et al. 2007, McAuley et al. 2011) as well as inhibit the development of chronic illness (Chodzko-Zajko et al. 2009). Many older adults value their independence but perceive functional limitations (Gabriel and Bowling 2004) and cognitive decline (Price et al. 2011) as threats to their ability to maintain their independence to make their own decisions and perform daily tasks.

Quality of life among many older adults can be improved with regular exercise and physical activity (Nelson et al. 2007). Scholarly literature has investigated the effects of the aging process on older adults which are marked by a decline in physical and mental functions that act as barriers to older adults engaging in exercise (Nelson et al. 2007). A number of studies demonstrate how exercise and physical activity were found to influence the aging process by improving physical functional performance in older adults (Elavsky and McAuley 2007, McAuley et al. 2007, McAuley et al. 2011, Patel et al. 2011) as

well as inhibiting the development of chronic illness (Chodzko-Zajko et al. 2009). However, some older adults often do not engage in physical activity due to the pain, fatigue and distress they experience from musculoskeletal discomfort and disability (Gabriel and Bowling 2004, Reid et al. 2008).

One particular challenge that many older adults face is the loss of independence to perform daily activities and make their own decisions. As some older adults face physical and mental challenges during the aging process, they seek to retain their own sense of independence and either avoid or become fearful of having to depend upon others. Many aging individuals experience the loss of what psychologists identify as self-efficacy, the belief in an individual's ability to achieve their goals or succeed in specific situations (Bandura 1997). Therefore, some older adults stand to regain a sense of independency to perform daily tasks and maintain their ability to make their own decisions by engaging in physical activities, which has the potential to enhance self efficacy beliefs leading to older adults regaining a sense of agency. Public health officials and gerontology specialists thus face the challenge of assisting aging individuals to regain a sense of agency and self-efficacy, as the aging process is associated with physical and cognitive limitations.

Research indicates that self-efficacy beliefs positively influence older adults perceived ability to engage in physical activity despite facing functional limitations (McAuley et al. 2007). Therefore, the present study has examined existing scholarship that demonstrates how some older adults stand to benefit from of engaging in physical activities that enhances self-efficacy beliefs, aiding them in overcoming the physical and mental barriers associated with the aging process. Additionally, the contributions of the present literature review will aid public health officials and gerontology specialists assisting older adults, in an effort to overcome the physical and mental barriers associated with the aging process, which prevent them from engaging in physical activity and exercise.

One physical activity that may enhance self-efficacy in the senior community is participation in a yoga community. Various yoga methods are being evaluated for the potential benefits of improving physical and mental health in community settings among older adults (Lee et al. 2004, Patel et al. 2011, Skoro-Kondza et al. 2009). Many older adults have much to gain from participating in community-based yoga interventions (Lee et al. 2004, Patel et al. 2011). Older adults who participated in community based yoga programs experienced decreased pain, stress, anxiety, and depression (Patel et al. 2011). Additionally, overall quality of life was found to positively influence older adults through the communal experience of membership in a yoga community (Lee et al. 2004).

Literature Review

Self-efficacy

Self-efficacy refers to a person's self-system and the belief in an individual's ability to succeed in specific situations (Bandura 1997). Individuals have various self-efficacy beliefs that regulate thought processes, motivation, and affective and physiological states (Bandura 1997). Perceived self-efficacy is measured by the ability to exercise control over actions under different conditions with the various skills one possesses (Bandura 1997). Bandura's (1986) Social Cognitive Theory identifies self-efficacy as the "active agent" in determining behavior based on learning from models as well as past experiences.

During the aging process, many adults are constantly re-evaluating their capabilities, which Bandura (1994) identifies as reappraisals and misappraisals of self-efficacy. As some older adults are faced with overcoming the physical and mental challenges associated with declining age, they experience reappraisals of self-efficacy. Reappraisals of self-efficacy occur when physical limitations prevent or prohibit some older adults from engaging in normal activities. The loss in physical capabilities as well as cognitive decline contributes to older adults' perceived ability to perform tasks and remain independent. Many older adults experience major changes in the later years of life including retirement, losing friends or a spouse and relocation, which are all contributing factors to their psychological well being. Experiencing the loss of a friend or spouse can increase social inefficacy and contributes to the stress and depression experienced from the loss of a social support system (Bandura 1994).

Self-efficacy has been researched and recognized as being influential in an individuals' ability to perform and engage in physical activity (Elavsky and McAuley 2007, McAuley et al. 2007). Factors that contribute to self-efficacy beliefs in regards to exercise include motivation and intention (McAuley et al. 2011). A number of studies have posited that engaging in regular physical activity improves functional performance in older adults (Elavsky and McAuley 2007, McAuley et al. 2007, McAuley et al. 2011, Patel et al. 2011). Specifically, the literature addresses how self-efficacy impacts physical activity in older women with physical limitations (McAuley et al. 2007), older adults with physical limitations (McAuley et al. 2011) and in menopausal women (Elavsky and McAuley 2007). Researchers hypothesized that changes in self-efficacy and functional performance mediate benefits of physical activity on individuals with functional limitations (McAuley et al. 2007). Among older adults, those participants who reported having high self-efficacy beliefs experienced greater success in the physical activity programs than those who reported low self-efficacy beliefs (McAuley et al. 2011).

Elavsky and McAuley (2007) conducted a randomized trial involving walking and yoga in menopausal women to measure the effects on self-esteem, self-efficacy, and body composition. Women reported having experienced

increased levels of self-efficacy and the results further indicate that middle-aged women may benefit from increased self-esteem by engaging in physical activity (Elavsky and McAuley 2007). Yoga interventions for women with menopause were found to be a successful intervention in increasing self-esteem and self-efficacy. McAuley et al. (2007) offer substantial data and evidence that self-efficacy beliefs positively influence the ability of some older adults to engage in physical activities such as exercise.

The Health Benefits of Yoga Among Older Adults

The literature reveals the numerous benefits of yoga in terms of the physical, mental, and spiritual health of practitioners (Brown and Gerbarg 2005, Raub 2002, Saper et al. 2004). According to Herrick and Ainsworth (2000), yoga is used as a self-care strategy to manage stress, diet, wellness, and exercise to promote a healthy lifestyle. Over time yoga increases strength, stamina, flexibility, balance and relaxation (Herrick and Ainsworth 2000). An emphasis on mind-body awareness is a key tenet of yoga, as yoga practitioners report an increase in energy, vitality and balanced emotions (Herrick and Ainsworth, 2000). Herrick and Ainsworth (2000) assert that individuals stand to benefit from structural, physiological, psycho-emotional and spiritual levels by engaging in a well-rounded yoga practice.

Studies have shown that yoga therapy has been associated with positive effects in patients that suffer from stress related symptoms (Raghavendra et al. 2007) chronic pain (Groessler et al. 2008) and hypertension (Mourya et al. 2009). One study suggests that yoga-asanas, also known as yoga postures, and pranayama breathing techniques facilitate regeneration and rejuvenation of pancreatic cells, in turn aiding the utilization of glucose in the body (Kutty and Raju 2010). Additionally, scientific evidence has found that the outcome of disease can be altered through life style modifications of incorporating yoga along with traditional treatment methods (Kutty and Raju 2010). Practicing yoga was found to reduce the pain and agony experienced from chronic disease (Kutty and Raju 2010) as well as improving overall quality of life by managing stress and reducing anxiety and depression (Herrick and Ainsworth 2000).

Scholars have evaluated the benefits of yoga as a therapeutic tool and intervention to improve health among older adults (Patel et al. 2011). Scientific evidence suggests that older adults benefit from regular physical activity (Chodzko-Zajko et al. 2009). Often, many older adults are faced with physical limitations that prevent them from engaging in exercise and subsequently older adults must adopt various techniques of exercise styles to accommodate for physical limitations (Chodzko-Zajko et al. 2009). Some older adults who adopt strategies to overcome their physical limitations are able to effectively engage in physical activity thus contributing to a sense of independence, ability to make their own decisions and perform daily tasks (Gabriel and Bowling 2004, McAuley et al. 2007, McAuley et al. 2011).

Many older adults often experience feelings of stress and anxiety from their lost sense of independence (Herrick and Ainsworth 2000). Yoga breathing techniques can help to bring awareness into the body and be used as a tool to

manage stress and tension (Herrick and Ainsworth 2000, Patel et al. 2011). Scientific evidence shows that stress contributes to the etiology of disease (Chodzko-Zajko et al. 2009) therefore health practitioners are advocating the practice of yoga to reduce and manage stress (Brown and Gerbarg 2005). According to Herrick and Ainsworth (2000: 33), "shallow breath" is a condition that often contributes to poor health by affecting the sympathetic nervous system arousal, depleting energy, and creating physical or emotional tension. Optimum health and well-being are affected by breathing and the practice of pranayama breathing techniques in yoga may prevent disease and increase longevity (Posadzki and Ernst 2011). By focusing on breath control, participants experienced improved health conditions related to their breathing ability as well as strengthening the respiratory muscles thus improving ventilation (Raub 2002).

Many older adults who are faced with physical limitations incorporate yoga into their exercise routine in order to improve their physical health (McAuley et al. 2007, McAuley et al. 2011). In light of the physical limitations and health problems facing many older adults, various yoga styles have been evaluated as a therapeutic tool to improve the quality of life during the aging process (Patel et al. 2011). Hatha yoga, a common style of yoga practiced in the West, is ideal for some older adults who face physical limitations because the postures can be individualized in consideration of injuries (Raub 2002). In addition, many older adults are able to use props to modify poses which include blocks, straps, chairs and blankets. The philosophy of Hatha Yoga involves connecting the mind with the body through the control of breath and movement practices that can be particularly helpful for those older adults who experience a loss in their ability to be independent and make decisions (Raub 2002).

Mind-body training programs such as yoga are becoming increasingly popular (Lee et al. 2004). Mind-body practices of yoga include breathing techniques (pranayama) and postures (asanas) and meditation practices (Lee et al. 2004). Various yoga methods are being evaluated for the potential benefits of improving physical and mental health in various community settings (Patel et al. 2011, Skoro-Kondza et al. 2009). Scholars advocate that community based mind-body training programs moderately improved participants quality of life and reduced depressive and anxiety symptoms (Lee et al. 2004). Additionally, participants reported having increased self-efficacy beliefs after 3 months of practicing yoga in the mind-body training program (Lee et al. 2004). These findings indicate that participation in a community based mind-body training program will positively impact self-efficacy beliefs among some older adults.

Conclusions

As the literature reveals, many older adults' ability to function independently is impacted by the physical and cognitive limitations associated with the aging process. Since many older adults experience the loss of what psychologists identify as self-efficacy, the present literature review sought to examine how the practice of yoga might aid in the development of self-efficacy beliefs among older adults. Subsequently, the decline in cognitive and physical health act as barrier for some older adults to engage in physical activity (Nelson et al. 2007). Despite these health concerns, research has shown that the aging process can be positively influenced by engaging in exercise and physical activity, which was found to inhibit the progression and development of chronic disease (Chodzko-Zajko et al. 2009). Due to overwhelming scientific evidence identifying that stress as a major contributor to the etiology of disease (Chodzko-Zajko et al. 2009), health practitioners are advocating the practice of yoga to reduce and manage stress (Brown and Gerbarg 2005).

The broad contribution of the present literature review informs public health officials and gerontologists of the potential to enhance self-efficacy among many older adults through the practice of yoga. Yoga breathing practices are used as stress management and relaxation techniques among older adults (Patel et al. 2011) and may prevent disease and increase longevity (Posadzki and Ernst 2011). Yoga has been found to improve overall quality of life by managing stress, reducing stress, anxiety and depression (Herrick and Ainsworth 2000).

As many older adults face challenges during the aging process, they seek to retain their own sense of independence and make their own decisions. Many older adults are unable to rely solely on themselves, therefore health officials and gerontologists face the challenge of assisting older adults in overcoming the loss independence and maintaining self-efficacy beliefs. Therefore, health-promoting behaviors among older adults is a critical public health issue for gerontologists and health officials as age is a primary risk factor for the development and progression of chronic disease among older adults (Chodzko-Zajko et al. 2009)

The current physical challenges facing many older adults can be alleviated through the practice of Hatha Yoga, which can be easily adapted to accommodate for any physical injury. Many older adults stand to greatly benefit from practicing yoga as a means to manage disease and promote health (Patel et al. 2011). By incorporating yoga to solve the practical health problem of accommodating physical limitations among aging adults, the current literature review contributes to the existing scholarship of the role self-efficacy plays in determining behavior. Since self-efficacy is an important factor that determines human behavior (Bandura 1997), examining how personal self-efficacy beliefs impact the practice of yoga serve to benefit health officials and gerontology specialists seeking to enhance the quality of life among many older adults.

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