Chapter

Emotional Intelligence and Ageing in a Sedentary World: Impacts on Quality of Life

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Abstract

Ageing is a multidimensional process shaped by biological decline, psychosocial adaptation, and shifting societal roles. While much of the focus in gerontology remains on physical, and cognitive deterioration, emotional intelligence (EI) emerges as a powerful yet underutilised resource that enhances resilience, self-regulation, and social functioning in later life. In parallel, sedentary lifestyles, characterised by prolonged physical inactivity, are on the rise globally, compounding risks of chronic illness, cognitive decline, depression, and reduced quality of life among older adults. This chapter explores how EI functions as a buffer against the emotional, and psychological toll of sedentarism by enabling older individuals to reframe challenges, maintain social connection, and engage in meaningful routines. Drawing on cross-cultural case studies from Zimbabwe, South Africa, and the United Kingdom, the chapter illustrates how socioeconomic, and cultural contexts shape the development and expression of EI, and influence ageing experiences. Community-based initiatives, such as faith-driven programmes, lifelong learning, and intergenerational activities, are shown to foster emotional resilience, and reduce social isolation. Institutional strategies and policy interventions are also discussed as mechanisms to promote EI and active ageing in diverse populations. Ultimately, the integration of EI, along with physical activity, into ageing policy, and practice is positioned as both a preventive, and empowering approach, one that offers a low-cost, scalable, and culturally adaptable means of enhancing quality of life in an increasingly sedentary world. By addressing both emotional and physical dimensions of ageing, interventions hold significant promise for creating more inclusive, sustainable, and emotionally intelligent frameworks for elder care.

Keywords: ageing, cross-cultural ageing, emotional intelligence, quality of life, sedentary lifestyle

1. Introduction

Globally, ageing populations are rising, placing increasing pressure on healthcare systems, and social support structures [1]. While many studies focus on the

physical, and cognitive decline associated with ageing, emotional development, and particularly emotional intelligence (EI), tends to improve with age and remains underexplored in its role in physical inactivity [2]. Sedentary lifestyles, characterised by prolonged sitting or inactivity, are prevalent among older adults and are associated with poor health outcomes, and reduced quality of life, particularly in the physical domain, and social participation facets [3].

This chapter adopts a multidisciplinary perspective to examine how EI intersects with ageing, and sedentary behaviour, highlighting the psychological, social, and cultural dynamics that shape the lived experiences of older adults. With a growing number of elderly individuals living more sedentary lives, understanding how emotional skills like regulation, awareness, and resilience influence adaptation to these conditions is crucial. Emotional intelligence not only buffers the psychological impacts of physical inactivity, but also offers a potential pathway for enhancing engagement, social connectivity, and cognitive health in late life [4]. Drawing on examples from lower-middle (Zimbabwe), upper-middle (South Africa), and high-income (UK) contexts, this chapter explores how varying socioeconomic, and cultural landscapes affect the interplay between EI, sedentary behaviour, and ageing, ultimately influencing quality of life in diverse ways.

Traditional models of ageing have largely emphasised physical decline, and medical vulnerability, often overlooking the emotional and psychological resources that older adults develop over time [5]. Emotional intelligence, in contrast, provides a framework for understanding how older individuals manage stress, maintain social bonds, and find purpose despite increasing sedentary constraints [6]. In a world where older adults are simultaneously living longer, and moving less, investing in emotional competence may offer an accessible, low-cost means to counteract the adverse effects of physical inactivity. As such, the integration of emotional and behavioural health in active ageing policies is not just desirable, it is necessary for sustainable and inclusive health systems across economic contexts [7].

1.1 The sedentary lifestyle crisis in ageing populations

The rise in sedentary behaviour among older adults has emerged as a silent, yet potent public health challenge worldwide [8]. Sedentary behaviour refers to any waking activity that involves low energy expenditure, typically while sitting, reclining, or lying down. Importantly, a sedentary lifestyle is not simply the absence of physical activity; it is a distinct behavioural pattern linked to a wide range of adverse health outcomes [9]. For ageing populations, prolonged sedentarism is linked to many conditions such as frailty, loss of muscle mass, cardiovascular disease, Type 2 diabetes, cognitive decline, and premature mortality [10]. The health risks compound when sedentary habits co-occur with age-related physiological changes, such as reduced mobility, chronic illness, and declining metabolic efficiency [11].

The problem is particularly pervasive in high-income countries (HICs), where digital technology, urban infrastructure, and healthcare access promote indoor and inactive lifestyles among the elderly [12, 13]. However, it is equally concerning in low-income countries (LICs), and middle-income countries (MICs), where urbanisation, socioeconomic inequality, and safety concerns may limit opportunities for physical activity [14]. In Zimbabwe, for example, a study by Makore and Al-Maiyah [15] demonstrated that older adults in urban areas often experience social isolation, and poor infrastructure, while in South Africa, two studies' findings by Dube et al. [16] and Mlangeni et al. [17] concurred that increasing urbanisation has led to declines in

traditional forms of physical engagement. Hakwins et al.'s study about older people in the UK, asserts that sedentary behaviours are prevalent, even in well-resourced eldercare facilities, where organisational structures, management practices, and staff training significantly impact residents' physical movement patterns, and reinforce inactivity [18]. This evidence clearly shows that structural, social, and environmental conditions play a significant role in reinforcing inactivity and limiting opportunities for meaningful engagement among older adults. However, EI acts as a psychological resource that empowers older adults to sustain wellbeing and engagement, even when structural and environmental barriers cannot be immediately unchanged.

Beyond physical consequences, the sedentary lifestyle crisis also imposes psychological costs. Extended periods of inactivity contribute to social withdrawal, boredom, depressive symptoms, and diminished self-worth, all factors that can erode quality of life in older adults [19]. These effects are often compounded by a lack of meaningful engagement or emotional stimulation, especially among those who live in care institutions [20]. Notably, EI may serve as a key mitigating factor [21]. Emotional regulation, a psychological process of managing intensity and duration of responses to emotional stimuli by evaluating them as positive or negative in relation to personal goals [21]. Older adults with higher EI may possess the emotional awareness and regulation skills necessary to adapt more effectively, seek out engagement (including in physical activity), and reframe their experiences in positive ways despite physical limitations [22].

While regular physical activity offers significant physiological, psychological, and social benefits for older adults [23, 24], a more comprehensive strategy is necessary. Public health campaigns, policy interventions, and caregiving practices must consider the emotional motivations, and social environments of older adults to create sustainable behaviour change and increase engagement in physical activity [25]. In this context, EI emerges as both a protective factor, and a potential catalyst for breaking the cycle of inactivity and improving quality of life in ageing populations.

2. Emotional intelligence: A lifespan perspective

Emotional intelligence is broadly defined as the capacity to recognise, understand, and manage one's own emotions and the emotions of others. Emotional Intelligence comprises four key abilities: perceiving emotions, using emotions to facilitate thought, understanding emotions, and managing emotions [26].

2.1 Development of emotional intelligence across the lifespan

Emotional intelligence, encompassing the ability to perceive, understand, regulate, and express emotions, follows a distinct developmental trajectory across the human lifespan [27]. While cognitive domains, such as processing speed and memory, hallmarks of fluid intelligence, tend to decline with age [28], emotional capacities often demonstrate resilience, and even growth [29]. Studies suggest that older adults exhibit greater emotional regulation [30], and increased empathy, and enhanced perspective-taking [31]. These improvements may stem from accumulated life experiences, refined coping mechanisms, and a shift in motivational priorities [32].

This behavioural shift is comprehensively explained by socioemotional selectivity theory, which postulates that with increasing age and a corresponding perception of limited future time, individuals exhibit a motivational shift towards the prioritisation of

emotionally salient and meaningful experiences, as opposed to novel or future-oriented goals [33]. Consequently, EI becomes a crucial buffer against the psychosocial challenges associated with ageing [2], particularly in a sedentary world where opportunities for engagement may be limited [34, 35]. Despite its potential to support healthy ageing, further research is required to comprehensively investigate the benefits of EI in older adults, particularly its role in promoting physical activity engagement, and to inform the development of targeted, evidence-based interventions [2].

2.2 Emotional intelligence and emotional regulation in older adults

Older adults' enhanced emotional regulation is partly attributed to life experience and neural changes that support selective attention towards positive stimuli, a phenomenon known as the "positivity effect" [36]. This tendency allows them to focus more on emotionally rewarding experiences and disengage from negative information [37]. As a result, they are more resilient when facing common stressors of ageing, such as loss, illness, or reduced independence [38]. Neurobiologically, age-related changes in the prefrontal cortex, and amygdala interaction contribute to this improved emotional modulation [39]. Despite declines in some cognitive domains, these emotion-related processes remain relatively preserved [30], reinforcing the importance of targeted emotional engagement, especially those including physical activity, with positive activities in line with emotion-regulation goals, as a compensatory tool in later life [40].

In sedentary environments, where physical activity is limited, and social interaction may be reduced, EI becomes a critical asset for maintaining psychological and social well-being [41]. Higher EI enables older adults to reinterpret sedentary time not purely as limitation, but as an opportunity for introspection, creative engagement, or virtual socialisation [42]. Those with strong emotional regulation skills are better equipped to buffer the emotional toll of inactivity, and isolation, maintaining a sense of purpose, and connection even in constrained settings [43]. This underscores the need for interventions that cultivate EI in ageing populations, not only to support mental health, but also to mitigate the broader impacts of a sedentary lifestyle on overall quality of life.

3. Sedentary lifestyle, and its impact on ageing

Sedentary lifestyles pose a significant public health concern for older adults, not only for their physical health but also their psychological well-being [44]. Physical inactivity often contributes to sarcopenia, and cognitive impairment [45]. Less frequently addressed is its psychological impact, including reduced self-esteem, increased anxiety, and depressive symptoms [46].

3.1 Sedentarism and mental health

Sedentary behaviour has been consistently linked to poorer mental health outcomes in older adults [47]. Reduced physical activity in the elderly can lead to diminished cognitive stimulation, disrupted sleep patterns, and a decline in mood-regulating neurochemicals such as endorphins and serotonin [48, 49]. Moreover, physical inactivity often reduces opportunities for spontaneous social interaction, and engagement in meaningful activities, increasing the risk of loneliness, depressive symptoms, and

anxiety [50]. As older adults experience limitations in mobility, or chronic conditions that restrict activity, these mental health risks can become more pronounced, forming a bidirectional relationship between physical inactivity, and emotional decline [51].

However, EI emerges as a critical protective factor in this relationship. Older adults with high EI are more self-aware, capable of recognising early signs of emotional distress, have high self-regulation and are more skilled in managing negative effects through adaptive coping strategies [52]. For example, these individuals may proactively seek social contact through virtual platforms and/or physical activity, maintain routines that support psychological well-being [53]. Their ability to regulate emotions and maintain a sense of purpose can buffer the psychological consequences of sedentarism, suggesting that physical interventions targeting EI could be especially beneficial in promoting mental health among sedentary ageing populations.

3.2 Intersection of emotional intelligence and sedentary behaviour

The intersection of EI and sedentary behaviour presents a complex, but promising area for understanding how older adults navigate the challenges of physical inactivity. While sedentarism often correlates with poorer health outcomes, individuals with higher EI demonstrate a greater capacity to adapt both emotionally and behaviourally [54]. These individuals are more likely to recognise the psychological effects of reduced activity, such as low mood, apathy, or isolation, and respond with proactive coping strategies [55]. For example, they may maintain structured daily physical activity routines and seek out low-impact activities like stretching or chair exercises and they too reframe inactivity not as a personal failing but as a temporary manageable state.

Moreover, EI has been positively associated with greater participation in health-promoting behaviours, including physical activity, in both younger, and older populations [41]. This suggests that emotionally intelligent older adults may be more likely to overcome the psychological inertia that often accompanies a sedentary lifestyle. Importantly, EI also supports self-reflective practices, allowing individuals to reframe inactivity not as failure, but as a temporary state that can be managed, or improved [41]. In this way, EI becomes both a buffer against the emotional toll of sedentarism, and a potential catalyst for re-engagement with physical activity, and social life [41].

These dynamics highlight the importance of integrating EI development into interventions aimed at reducing sedentary behaviour among older adults. Programmes that build EI, through mindfulness training, emotional regulation exercises, or social-emotional learning, could empower older individuals to not only cope more effectively with inactivity, and improve health outcomes [56], but also find internal motivation to engage in healthier, more active lifestyles [57]. By targeting both the emotional and physical dimensions of ageing, such interventions provide a more holistic and integrated approach to enhancing overall quality of life in older adults.

4. Cross-cultural perspectives: Zimbabwe, South Africa, and the UK

4.1 Emotional intelligence and ageing in Zimbabwe: A lower-middle-income perspective

In Zimbabwe, the ageing experience is deeply embedded within traditional cultural structures, particularly extended family systems, and communal living

arrangements [58]. As a result of the nation-wide gaps in emotional and psychological assistance, these social frameworks often provide emotional support, and a sense of belonging for older adults, contributing positively to their EI, and overall quality of life [59]. Despite widespread economic challenges, and limited access to formal healthcare, or structured physical activity programmes, older individuals often find resilience through intergenerational relationships, community gatherings, and roles within the family that uphold their social value, and purpose [60].

Spiritual engagement also plays a significant role in emotional, and physical regulation, among Zimbabweans [61]. Religious participation, and cultural rituals, such as traditional games and dance, provide not only emotional grounding, but also opportunities for social interaction, and reflection, reinforcing emotional resilience even in the face of physical hardship, or sedentarism [16, 62]. While material resources may be scarce in countries like Zimbabwe, the reliance on communal support networks, and spiritual and cultural practices has shown to mitigate the psychological burden of ageing in low-resource settings, highlighting the adaptive power of culturally rooted EI [63].

4.2 Emotional intelligence and ageing in South Africa: An upper-middle-income perspective

South Africa's ageing population faces unique challenges as the country transitioned to an aged society in 2025 [64]. This demographic shift occurs amidst a complex socio-cultural landscape shaped by traditional values and modernising urban environments. Older South Africans navigate these changes through social, and spatial (im)mobilities, intergenerational relationships, and interdependencies [65]. The ageing experience varies significantly across different population groups, with socioeconomic disparities impacting perceived well-being [66]. Traditional family structures are evolving due to rural-urban migration, and industrialisation, necessitating a socio-theological gerontology approach to understand successful ageing in the region [67]. In urban centres, lifestyle shifts have led to increased sedentary behaviour among older adults, driven by limited walkable infrastructure, safety concerns, and reduced physical engagement [68]. However, in more traditional, or rural settings, the cultural emphasis on community, family care, and interdependence remains strong, offering emotional and social support that bolsters mental well-being [69].

This cultural duality creates significant variability in ageing experiences, where access to physical activity programmes, and healthcare services often depends on geographic and socioeconomic factors [70]. Public health campaigns promoting active ageing are in place, but frequently fail to reach underserved communities, limiting their impact. In a national population-based study of older adults conducted by Peltzer and Phaswana-Mafuya, findings show high prevalence of physical inactivity among older adults in South Africa and highlights the need for strategic interventions in the broader community [71]. Enhancing EI through targeted training programmes may offer a promising strategy for promoting physical activity and reducing sedentary behaviour [72]. Policy responses must address these multifaceted challenges, including enhancing awareness of ageing implications, and mainstreaming ageing concerns in public policy [64, 73].

4.3 Emotional intelligence and ageing in United Kingdom: A high-income perspective

The United Kingdom faces significant challenges in supporting its ageing population due to increasing healthcare demands, and resource constraints [74].

The growing proportion of elderly individuals has led to a surge in chronic diseases, and age-related conditions, necessitating specialised, and long-term care [1]. While the post-war 'welfare generation' has benefited from improved health and education, concerns have been raised about potential intergenerational conflicts over welfare resources [75].

Despite these structural advantages, many elderly experience high levels of loneliness, and social isolation, particularly those living alone, or in institutional care settings [76]. A sedentary lifestyle is prevalent, exacerbated by factors such as reduced mobility, inclement weather, and limited motivation for physical activity in later life [77–79]. This combination of physical inactivity and social disconnection poses significant risks to both mental and physical health, underscoring the need for holistic approaches to ageing that go beyond medical care.

In the United Kingdom, opportunities to cultivate EI are supported through various community initiatives, including social clubs, therapeutic services, and lifelong learning programmes aimed at cognitive, and emotional enrichment [6, 80]. Participation in these activities not only enhances self-awareness, and emotional regulation, but also fosters social engagement, and a sense of purpose [6, 80]. For many older adults, these emotionally intelligent coping strategies can counterbalance the effects of a sedentary lifestyle, leading to improved quality of life, and greater psychological resilience in a high-income country, but often emotionally disconnected environment [81, 82].

5. Emotional intelligence as a buffer against sedentarism

5.1 Enhancing resilience and adaptability

Emotional intelligence plays a pivotal role in enhancing resilience, and adaptability among older adults facing increasingly sedentary lifestyles. Favouring, the process of attending to positive experiences, mediates the relationship between resiliency and mental health in older adults, supporting the Broaden and Build Theory of positive emotions [83]. By engaging in cognitive control, particularly mental set shifting, an EI-driven strategy that involves reinterpreting adverse situations in a more positive light, older adults can maintain a sense of control, and psychological balance [84]. This capacity to regulate emotions enables them to remain socially connected, pursue meaningful routines, and preserve mental health despite reduced physical engagement [85].

Moreover, structured programmes that foster EI, either through mindfulness exercise, reflective journaling, group discussions, or emotional literacy training, can promote adaptability by encouraging older adults to remain not just physically healthy, but also mentally flexible and optimistic [81, 86]. These interventions help individuals develop greater self-awareness and empathy, which in turn foster stronger interpersonal relationships, and a more positive outlook [81]. As a result, the physical and psychological burden of sedentarism is mitigated not by physical movement alone, but by enhanced emotional processing, and resilience.

5.2 Promoting active ageing through emotional intelligence-focused interventions

Emotional intelligence-focused interventions have shown significant promise in promoting active ageing by targeting both emotional well-being and physical

engagement. In this regard, research indicates that EI positively impacts psychological, social, and physical well-being in older adults [2]. Mindfulness-based programmes, for instance, teach older adults to become more aware of their bodily sensations, thoughts, and emotional states, foster self-regulation, and reduce stress [87]. Research has shown that regular mindfulness practice can enhance motivation, and self-efficacy, which in turn, may encourage older adults to adopt healthier behaviours, including more consistent engagement in physical activity [88]. By cultivating a deeper connection between mind and body, mindfulness supports both emotional balances, and reduced sedentarism [88, 89].

Group therapy, and peer-led support initiatives are also powerful tools for promoting EI, while indirectly encouraging movement [90]. These programmes offer emotionally safe spaces for older adults to share personal experiences, practice empathy, and build meaningful social connections [91]. The supportive group dynamics often inspire participation in joint activities, such as walking clubs, gardening projects, or gentle exercise routines [92]. The emotional reinforcement provided by these social bonds can help counteract the inertia associated with sedentary behaviour, making active lifestyles more sustainable, and enjoyable [93].

Arts-based activities, such as dance, music, drama, or painting, further integrate emotional and physical engagement [16]. These interventions not only stimulate creativity and emotional expression, but also often involve light physical movement, social interaction, and cognitive engagement [94]. Participating in a community choir, for example, enhances mood, and fosters a sense of belonging, while also promoting physical activity [95]. As a result, arts-based interventions function as a holistic approach to ageing, where EI, and physical activity reinforce one another, leading to improved overall well-being, and reduced sedentary time [96].

6. Strategies for promoting emotional intelligence in elderly populations

6.1 Community-level strategies for promoting emotional intelligence

Community-level interventions play a vital role in promoting EI among elderly populations by fostering social engagement, emotional expression, and lifelong learning [97]. In MICs like Zimbabwe, and South Africa, grassroots programmes, leveraging cultural, and religious traditions can foster EI, and mitigate the effects of sedentarism [98], including incorporating those programmes as used in Nigeria [99]. Initiatives like the UK's University of the Third Age (U3A), local senior centres, or faith-based organisations provide not only social outlets but also structured opportunities for older adults to develop self-awareness, and interpersonal skills, all of which are core components of EI [100]. These communal environments reduce isolation and empower older individuals to maintain a sense of purpose, belonging, and emotional vitality [101, 102]. These interventions also work through mechanisms, such as improved self-efficacy, outcome expectations, goal-setting, and institutional support [103]. Importantly, these group dynamics-based interventions have also shown effectiveness in increasing and sustaining physical activity levels over time [103].

To be effective, such interventions must be culturally sensitive and accessible, addressing barriers like mobility limitations, digital exclusion, and language differences [104, 105]. Incorporating low-cost, scalable activities, such as group-based physical activities, storytelling, mindfulness sessions, or emotional literacy discussions, can help reach diverse segments of the ageing population [106–108]. By

embedding EI-enhancing practices into the fabric of community life, these interventions contribute to healthier ageing, and greater psychological resilience, particularly in the face of sedentary living, and reduced physical independence.

6.2 Institutional and policy approaches for promoting emotional intelligence

Institutional and policy-level strategies play a pivotal role in embedding EI within ageing support systems, particularly in formal care environments, and public health planning [109]. In eldercare institutions, integrating EI-focused programming, such as emotion regulation workshops, caregiver communication training, and structured group therapy, can enhance the emotional well-being of both residents and staff [110]. Institutions that prioritise EI care practices, such as empathetic listening, autonomy-supportive environments, and opportunities for meaningful engagement, report better resident satisfaction, and reduced rates of depression, and social withdrawal [111]. For staff, EI training improves caregiver-patient relationships, reduces burnout, and fosters a more compassionate care culture [110, 112]. These interventions not only improve quality of life for older adults, but also create emotionally sustainable work environments in healthcare, and residential settings [110].

At the policy level, national ageing frameworks must go beyond physical health to include emotional and psychological dimensions of well-being [113]. Policies that support lifelong learning, community participation, and mental wellness, especially in low-, middle-, and even high-income countries, are essential for fostering EI across diverse ageing populations [114]. Government investment in intersectoral initiatives, such as linking health, education, housing, and social services, can ensure that older adults have equitable access to emotionally enriching environments [115]. For example, subsidising participation in arts-based programmes, mandating emotional competency training in eldercare certification, and promoting EI as a health determinant in national health guidelines can transform ageing policy [116]. By institutionalising EI through policy and practice, governments, and care organisations can more effectively address both the physical, and emotional challenges of sedentary ageing, while promoting holistic, person-centred care.

6.3 Physical activity as a catalyst for emotional intelligence

While physical activity is widely recognised for its benefits to cardiovascular, musculoskeletal, and cognitive health, its role in enhancing EI among older adults is increasingly acknowledged [117]. Structured physical activity, particularly aerobic, resistance, and combined training, can positively influence emotional regulation, stress tolerance, self-awareness, and mood stability, all of which are central dimensions of EI.

Aerobic training, such as walking, swimming, or cycling, has been shown to stimulate endorphin release, reduce cortisol levels, and improve overall affective states [118, 119]. These physiological changes can enhance an individual's capacity for emotional self-regulation, and resilience, even following acute exercise [120]. Regular aerobic activity also promotes better sleep, and cognitive clarity [121], which in turn, contributes to more mindful emotional responses, and less impulsivity [122, 123].

Resistance training, including weightlifting, bodyweight exercises, and resistance bands, not only improves health outcomes, such as injury prevention, and disease prevention in the elderly [124], it also supports EI development through its focus on discipline, self-mastery, and goal-setting, although this has only been explored in youth [125].

These resistance training activities often improve confidence, and self-efficacy in older adults [126], key components of intrapersonal EI. For many older adults, successfully completing resistance training fosters a sense of control, and achievement that can buffer against emotional volatility, and helplessness associated with physical decline, and are also important for long-term physical activity adherence [127].

Combined exercise training programmes, those that integrate both aerobic, and resistance modalities, appear especially effective in improving both physiological [128–130] and psychological well-being [130]. Emerging research suggests these multi-modal routines, especially when combined with cognitive training, may enhance executive function, and emotional regulation capacity, creating a neurobiological environment more conducive to developing empathy, perspective-taking, and impulse control [131].

Moreover, group-based physical activity offers additional social-emotional benefits. Participating in community exercise classes, walking groups, or dance therapy not only promotes movement, but also strengthens social bonds, reduces loneliness, and provides opportunities for emotional expression, and empathy development in a communal setting [132].

Designing physical activity programmes with emotional goals in mind, such as stress relief, social interaction, and confidence building, can transform traditional exercise into a platform for both holistic physical and emotional growth [133]. Healthcare providers, caregivers, and policymakers should view physical activity not only as a medical prescription for ageing bodies, but as a powerful tool for fostering EI, and enhancing quality of life in later years [134].

7. Practical applications

As the global ageing population rapidly increases, it has become coherent to apply EI in more concrete practical ways. The intentional use of strategies to enhance EI has the potential to improve older adults' quality of life, social connections, cognitive health, resilience, and overall well-being, while also supporting caregiving and informing community and policy initiatives [110, 112, 135–138]. **Figure 1** shows a cyclical model demonstrating how EI empowers self-regulation, resilience, and social awareness in older adults, helping them reframe challenges and enhance their quality of life.

Integrating lifelong training programmes may offer a practical holistic approach to health ageing. Programmes that can be hosted at community centres, libraries, or online platforms such short courses and workshops can be developed to teach adults skills such as.

- Emotional recognition, a fundamental for self-awareness and empathy [110, 135]. Incorporating guided exercises that use images, role plays, emotion daily recording and reflection, and real-life stories that can facilitate an older adult's ability to identify emotions in self and others. This can enhance greater self-awareness and empathy through better recognition of others' emotions.

- Stress management and regulation can help older adults cope with age-related stress such as health challenges and coping with grief of someone or something important [136]. Mindfulness games and emotional regulation activities such as breathing exercises, and cognitive reappraisal can be effective to cope with

Figure 1.
A cyclical model of emotional intelligence (EI) as a pathway to improved quality of life in older adults. The challenge—*This phase illustrates an older adult in a sedentary state, accompanied by icons that depict physical decline and social isolation.* The emotional intelligence (EI) intervention hub—*a central hub representing EI, which includes key components such as self-regulation, emotional resilience, and social awareness.* The behavioural shift—*extension from the EI hub to various positive actions, including reframing challenges, maintaining social connections, and engaging in meaningful routines.* The outcome—*signs of an improved quality of life, reflecting better physical and mental health.*

health and life challenges by reducing anxiety, depression and improving resilience to old-age stressors.

- The ability to adapt to social skills is crucial to this population. Training in communicating effectively and tailored guidance on maintaining and creating new social connections, problems and conflicts resolution and role-play for revolving family dynamics can build stronger relationships and improve life satisfaction [52].

- Social engagement and intergenerational programmes, such as peer support groups, collaborative problem-solving tasks, art and music activities, storytelling, life skills sharing [136, 138], EI exercises, and memory games where young people support older adults with digital skills, are effective in fostering connections between generations [139]. These activities promote active listening, mentorship, empathy,

perspective-taking, and meaningful relationships. They also help reduce loneliness and isolation, build supportive networks, and strengthen community bonds that contribute to healthier, more connected ageing.

- Emotional intelligence (EI) training can be an important tool in caregiver support programmes, focusing on empathy, burnout prevention and communication [136, 137], which in turn benefits the older adults in their daily care.

- Caregiving training programmes that include identifying non-verbal cues, role-playing in challenging scenarios, and engaging in reflective sessions may enhance carers' empathy by helping them recognise their own emotional responses as well as those of the older adults they support, especially when communication is difficult [85]. Such approaches can lead to stronger caregiver-older adult relationships and foster more compassionate, personalised care.

- Burnout prevention is crucial. Emotional intelligence (EI) training for professional and family caregivers should equip them with self-regulation strategies to manage emotional fatigue [112]. Activities focused on stress management, self-care planning, and mindfulness, such as meditation and deep breathing, can promote relaxation and mental clarity, thereby reducing stress and frustration, enhancing job satisfaction, and building greater resilience in emotionally demanding situations.

- Improving communication ensures a more positive care environment by promoting empathy driven, clear and respectful interactions [83]. Importantly, active listening, validation and reframing communication, engaging in handling difficult conversations, and collaborative team discussions reduce misunderstandings and conflicts in care settings, and improve trust and rapport between caregivers, older adults, their families and their communities.

- Health professionals can integrate EI principles into chronic disease management by assisting older adult patients to cope with psychological strain of living with long-term illness [137]. Activities that include decoding emotions, and mindfulness and stress reduction workshops, daily emotional and gratitude recording, and role playing—coping strategies practice and difficult conversation scenarios have potential of reducing fear, stress, and sadness improving treatment adherence, building resilience in case of health challenges.

- Group therapy and peer-support initiatives play a vital role in embedding EI into clinical care [81]. Participating in structured discussions, empathy circles and mindfulness practices, older adults can share lived experiences, strengthening emotional skills in a supportive environment. Such intervention reduces social isolation, symptoms of anxiety and depression, enhancing self-esteem and belonging, and mental health outcomes.

- Emotional intelligence-based cognitive rehabilitation links emotional processing to cognitive health [138]. Engaging in activities such as empathy-driven problem solving, reading verbal and non-verbal social cues, and storytelling improves memory, attention and cognitive flexibility, reinforcing social engagement. By combining cognitive and emotional strategies, older adults gain improved capacity to manage their daily challenges and maintain stronger interpersonal connections.

8. Conclusion

Emotional intelligence (EI) is a crucial yet often underutilised resource that contributes to the well-being and quality of life of older adults, especially in the context of sedentary lifestyles [81]. Across various cultural and socioeconomic backgrounds, EI consistently serves as a buffer against the psychological and social challenges associated with ageing by enhancing emotional regulation, resilience, and connectedness. Whether through community traditions in Zimbabwe, changing family structures in South Africa, or organised programmes in the UK, EI helps older adults reframe their limitations, maintain meaningful relationships, and find purpose.

Looking ahead, research should focus not only on documenting the associations of EI but also on testing scalable, context-sensitive interventions that combine EI with physical activity, social engagement, and caregiving. Policy and practice must recognise EI as not just an individual trait but as a modifiable resource that can be cultivated through lifelong learning, intergenerational exchange, and institutional training. By incorporating EI into public health frameworks and community initiatives, societies can promote healthier, more connected, and emotionally resilient ageing across diverse populations.

Conflict of interest

The authors declare no conflict of interest.

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References

[1] Osareme J, Ogugua MM, Maduka CP, Olorunsogo TO, Omotayo O. Demographic shifts and healthcare: A review of aging populations and systemic challenges. International Journal of Science and Research Archive. 2024;**11**(01):383-395. DOI: 10.30574/ijsra.2024.11.1.0067

[2] Cé R, Goedert AR. The influence of emotional intelligence on healthy aging. International Journal of Clinical Case Reports and Reviews. 2025;**22**(3):1-10

[3] Meneguci J, Sasaki JE, Santos A, Scatena LM, Damião R. Sitting time and quality of life in older adults: A population-based study. Journal of Physical Activity and Health. 2015;**12**(11):1513-15139. DOI: 10.1123/jpah.2014-0233

[4] Matz-Costa C, Carr DC, McNamara TK, James JB. Physical, cognitive, social, and emotional mediators of activity involvement and health in later life. Research on Aging. 2016;**38**(7):791-815. DOI: 10.1177/0164027515606182

[5] Bowling A. Aspirations for older age in the 21st century: What is successful aging? The International Journal of Aging and Human Development. 2007;**64**(3):263-297. DOI: 10.2190/L0K1-87W4-9R01-7127

[6] Chen Y, Peng Y, Fang P. Emotional intelligence mediates the relationship between age and subjective well-being. The International Journal of Aging and Human Development. 2016;**83**(2):91-107. DOI: 10.1177/0091415016648705

[7] Lak A, Rashidghalam P, Myint PK, Baradaran HR. Comprehensive 5P framework for active aging using the ecological approach: An iterative systematic review. BMC Public Health. 2020;**20**(1):33. DOI: 10.1186/s12889-019-8136-8

[8] Wullems JA, Verschueren SM, Degens H, Morse CI, Onambélé GL. A review of the assessment and prevalence of sedentarism in older adults, its physiology/health impact and non-exercise mobility counter-measures. Biogerontology. 2016;**17**(3):547-565. DOI: 10.1007/s10522-016-9640-1

[9] Jochem C, Schmid D, Leitzmann MF. Introduction to sedentary behaviour epidemiology. In: Sedentary Behaviour Epidemiology. Cham: Springer International Publishing; 2017. pp. 3-29. DOI: 10.1007/978-3-319-61552-3_1

[10] Goyal J, Rakhra G. Sedentarism and chronic health problems. Korean Journal of Family Medicine. 2024;**45**(5):239. DOI: 10.4082/kjfm.24.0099

[11] Tremblay MS, Colley RC, Saunders TJ, Healy GN, Owen N. Physiological and health implications of a sedentary lifestyle. Applied Physiology, Nutrition, and Metabolism. 2010;**35**(6):725-740. DOI: 10.1139/H10-079

[12] Cleland C, Reis R, Hino A, Hunter R, Fermino R, de Paiva HK, et al. Built environment correlates of physical activity and sedentary behaviour in older adults: A comparative review between high and low-middle income countries. Health and Place. 2019;**57**:277-304. DOI: 10.1016/j.healthplace.2019.05.007

[13] Mello GT, Lopes MV, Minatto G, Costa RM, Matias TS, Guerra PH, et al. Clustering of physical activity, diet and sedentary behavior among

youth from low-, middle-, and high-income countries: A scoping review. International Journal of Environmental Research and Public Health. 2021;**18**(20):10924. DOI: 10.3390/ijerph182010924

[14] Gaskin CJ, Orellana L. Factors associated with physical activity and sedentary behavior in older adults from six low-and middle-income countries. International Journal of Environmental Research and Public Health. 2018;**15**(5):908. DOI: 10.3390/ijerph15050908

[15] Makore BC, Al-Maiyah S. Moving from the margins: Towards an inclusive urban representation of older people in Zimbabwe's policy discourse. Societies. 2021;**11**(1):7. DOI: 10.3390/soc11010007

[16] Dube A, Shaw I, Mathunjwa ML, Shaw BS. Impact of traditional dance and games on cardiovascular health: A scoping review of outcomes across diverse low-and middle-income countries. International Journal of Environmental Research and Public Health. 2025;**22**(3):440. DOI: 10.3390/ijerph22030440

[17] Mlangeni L, Makola L, Naidoo I, Chibi B, Sokhela Z, Silimfe Z, et al. Factors associated with physical activity in South Africa: Evidence from a national population-based survey. The Open Public Health Journal. 2018;**11**(1):516-525. DOI: 10.2174/1874944501811010516

[18] Hawkins RJ, Prashar A, Lusambili A, Ellard DR, Godfrey M. 'If they don't use it, they lose it': How organisational structures and practices shape residents' physical movement in care home settings. Ageing and Society. 2018;**38**(9):1817-1842. DOI: 10.1017/S0144686X17000290

[19] Dolenc P, Petrič M. Psychological benefits of exercise and physical activity in older adults. Annales Kinesiologiae. 2019;**9**(2):121-134. DOI: 10.35469/ak.2018.167

[20] van Beek AP, Frijters DH, Wagner C, Groenewegen PP, Ribbe MW. Social engagement and depressive symptoms of elderly residents with dementia: A cross-sectional study of 37 long-term care units. International Psychogeriatrics. 2011;**23**(4):625-633. DOI: 10.1017/S1041610210002061

[21] Lloyd SJ, Malek-Ahmadi M, Barclay K, Fernandez MR, Chartrand MS. Emotional intelligence (EI) as a predictor of depression status in older adults. Archives of Gerontology and Geriatrics. 2012;**55**(3):570-573. DOI: 10.1016/j.archger.2012.06.004

[22] Goleman D. Emotional intelligence. Why it can matter more than IQ. Learning. 1996;**24**(6):49-50

[23] Archer E, Paluch AE, Shook RP, Blair SN. Physical activity and the science of successful aging. Kinesiology Review. 2013;**2**(1):29-38. DOI: 10.1123/krj.2.1.29

[24] Nahand MS, Najafababdi MG, Naghdi N, Sheikh M, Shaw BS. Effect of combined aquatic and cognitive training on quality of life, fall self-efficacy, and motor performance in aged with varying cognitive status: A proof-of-concept study. Journal of Exercise Rehabilitation. 2020;**16**(2):148. DOI: 10.12965/jer.2040076.038

[25] Shaw I, Mathunjwa ML, Shaw BS. Physical activity and health promotion: A public health imperative. In: Health Promotion-Principles and Approaches. London, UK: IntechOpen; 2023. DOI: 10.5772/intechopen.111927

[26] Mayer JD, Salovey P. What is emotional intelligence? In: Sluyter DJ, editor. Emotional Development and

Emotional Intelligence: Educational Implications. New York, NY: Basic Books; 1997

[27] Petrides KV, Mikolajczak M, Mavroveli S, Sanchez-Ruiz MJ, Furnham A, Pérez-González JC. Developments in trait emotional intelligence research. Emotion Review. 2016;**8**(4):335-341. DOI: 10.1177/1754073916650493

[28] Li SC, Lindenberger U, Hommel B, Aschersleben G, Prinz W, Baltes PB. Transformations in the couplings among intellectual abilities and constituent cognitive processes across the life span. Psychological Science. 2004;**15**(3):155-563. DOI: 10.1111/j.0956-7976.2004.01503003.x

[29] Carstensen LL, Mikels JA. At the intersection of emotion and cognition: Aging and the positivity effect. Current Directions in Psychological Science. 2005;**14**(3):117-121. DOI: 10.1111/j.0963-7214.2005.00348.x

[30] Urry HL, Gross JJ. Emotion regulation in older age. Current Directions in Psychological Science. 2010;**19**(6):352-357. DOI: 10.1177/0963721410388395

[31] O'Brien E, Konrath SH, Grühn D, Hagen AL. Empathic concern and perspective taking: Linear and quadratic effects of age across the adult life span. Journals of Gerontology. Series B, Psychological Sciences and Social Sciences. 2013;**68**(2):168-175. DOI: 10.1093/geronb/gbs055

[32] Zhang X, Fung HH, Stanley JT, Isaacowitz DM, Ho MY. Perspective taking in older age revisited: A motivational perspective. Developmental Psychology. 2013;**49**(10):1848. DOI: 10.1037/a0031211

[33] Shavit Y, Carstensen L. Age associated with preference for more and emotionally meaningful information in time-use decisions. Innovation in Aging. 2020;**4**(Suppl. 1):502. DOI: 10.1093/geroni/igaa057.1621

[34] Billson JH, Cilliers JF, Pieterse JJ, Shaw BS, Shaw I, Toriola AL. Comparison of home-and gymnasium-based resistance training on flexibility in the elderly. South African Journal for Research in Sport Physical Education and Recreation. 2011;**33**(3):1-9

[35] Rosso AL, Taylor JA, Tabb LP, Michael YL. Mobility, disability, and social engagement in older adults. Journal of Aging and Health. 2013;**25**(4):617-637. DOI: 10.1177/0898264313482489

[36] Sasse LK, Gamer M, Buechel C, Brassen S. Selective control of attention supports the positivity effect in aging. PLoS ONE. 2014;**9**(8):e104180. DOI: 10.1371/journal.pone.0104180

[37] Mather M, Carstensen LL. Socioemotional selectivity theory. Trends in Cognitive Sciences. 2005;**9**(10):496-502

[38] Glicken MD. Learning from Resilient People: Lessons We can apply to Counselling and Psychotherapy. Vol. 3. Thousand Oaks, California: Sage; 2006. DOI: 10.4135/9781452232539.n9

[39] Roalf DR, Pruis TA, Stevens AA, Janowsky JS. More is less: Emotion induced prefrontal cortex activity habituates in aging. Neurobiology of Aging. 2011;**32**(9):1634-1650. DOI: 10.1016/j.neurobiolaging.2009.10.007

[40] Hess TM, Hertzog C. Activity selection and engagement in old age: Motivational and goal-based influences. Innovation in Aging. 2019;**3**(Supp 1):

S811-S812. DOI: 10.1093/geroni/igz038.2991

[41] Zysberg L, Hemmel R. Emotional intelligence and physical activity. Journal of Physical Activity and Health. 2018;**15**(1):53-56. DOI: 10.1123/jpah.2016-0654

[42] Mcewan T, Tam-Seto L, Dogra S. Perceptions of sedentary behavior among socially engaged older adults. The Gerontologist. 2017;**57**(4):735-744. DOI: 10.1093/geront/gnv689

[43] Harp NR, Neta M. Tendency to share positive emotions buffers loneliness-related negativity in the context of shared adversity. Journal of Research in Personality. 2023;**102**:104333. DOI: 10.1016/j.jrp.2022.104333

[44] Shaw BS, Brown GA, Shaw I. Importance of Resistance Training in the Management of Cardiovascular Disease Risk. London, UK: IntechOpen; 2022. DOI: 10.5772/intechopen.99710

[45] Peng TC, Chen WL, Wu LW, Chang YW, Kao TW. Sarcopenia and cognitive impairment: A systematic review and meta-analysis. Clinical Nutrition. 2020;**39**(9):2695-2701. DOI: 10.1016/j.clnu.2019.12.014

[46] Hiles SA, Lamers F, Milaneschi Y, Penninx BW. Sit, step, sweat; longitudinal associations between physical activity patterns, anxiety and depression. Psychological Medicine. 2017;**47**(8):1466-1477. DOI: 10.1017/S0033291716003548

[47] Hong C, Liu Z, Liu Y, Jin Y, Luo Y. The role of smoking, obesity, and physical inactivity in cognitive performance and decline: A multicohort study. The Journals of Gerontology. Series A, Biological Sciences and Medical Sciences. 2024;**79**(2):glad232. DOI: 10.1093/gerona/glad232

[48] Stanley N. The physiology of sleep and the impact of ageing. European Urology Supplements. 2005;**3**(6):17-23. DOI: 10.1016/S1569-9056(05)80003-X

[49] Vance DE, Wadley VG, Ball KK, Roenker DL, Rizzo M. The effects of physical activity and sedentary behavior on cognitive health in older adults. Journal of Aging and Physical Activity. 2005;**13**(3):294-313. DOI: 10.1123/japa.13.3.294

[50] Netz Y, Goldsmith R, Shimony T, Arnon M, Zeev A. Loneliness is associated with an increased risk of sedentary life in older Israelis. Aging and Mental Health. 2013;**17**(1):40-47. DOI: 10.1080/13607863.2012.715140

[51] Milaneschi Y, Penninx WJH, B. Depression in older persons with mobility limitations. Current Pharmaceutical Design. 2014;**20**(19):3114-3118. DOI: 10.2174/13816128113196660060

[52] Meléndez JC, Delhom I, Bueno-Pacheco A, Reyes MF, Satorres E. Emotional intelligence predicting ego integrity in healthy older adults. Aging and Mental Health. 2023;**27**(4):838-843. DOI: 10.1080/13607863.2022.2068125

[53] Greenwood-Hickman MA, Dahlquist J, Cooper J, Holden E, McClure JB, Mettert KD, et al. "They're going to zoom it": A qualitative investigation of impacts and coping strategies during the COVID-19 pandemic among older adults. Frontiers in Public Health. 2021;**9**:679976. DOI: 10.3389/fpubh.2021.679976

[54] Megías A, Gutiérrez-Cobo MJ, Gómez-Leal R, Cabello R, Fernández-Berrocal P. Performance on emotional tasks engaging cognitive control depends on emotional intelligence abilities: An ERP study. Scientific

Reports. 2017;**7**(1):16446. DOI: 10.1038/s41598-017-16657-y

[55] Petrides KV, Furnham A. Trait emotional intelligence: Behavioural validation in two studies of emotion recognition and reactivity to mood induction. European Journal of Personality. 2003;**17**(1):39-57. DOI: 10.1002/per.466

[56] Mathunjwa M, Shaw I, Moran J, Sandercock GR, Brown GA, Shaw BS. Implementation of a community-based mind–body (Tae-Bo) physical activity programme on health-related physical fitness in rural black overweight and obese women with manifest risk factors for multimorbidity. International Journal of Environmental Research and Public Health. 2023;**20**(15):6463. DOI: 10.3390/ijerph20156463

[57] Hmwe NT, Chan CM, Shayamalie TG. Older people's experiences of participation in mindfulness-based intervention programmes: A qualitative systematic review. International Journal of Mental Health Nursing. 2024;**33**(5):1272-1288. DOI: 10.1111/inm.13350

[58] Kimuna SR. Living arrangements and conditions of older people in Zimbabwe. African Population Studies. 2005;**20**(2):143-163. DOI: 10.11564/20-2-398

[59] Jothikaran TAJ, Meershoek A, Ashok L, Krumeich A. Older adults in traditional and modern living arrangements in southern India: The importance of maintaining a sense of belonging and positive intergenerational exchanges. Journal of Aging Studies. 2020;**54**:100867. DOI: 10.1016/j.jaging.2020.100867

[60] Wagner-Gutiérrez N, Gonzalez SA, Rubio MA, Sánchez-Franco S, Palencia-Pérez L, Blanco M, et al. Quality of life, mental health and social relationships among older adults participating in the Recreovía physical activity community program. International Journal for Equity in Health. 2025;**24**(1):145. DOI: 10.1186/s12939-025-02476-5

[61] Machinga M. Religion, health, and healing in the traditional Shona culture of Zimbabwe. Practical Matters. 2011;**4**:1-8

[62] Williams L. Building an ecology of resilience through religious practice and community in northern Uganda. Civil Wars. 2022;**24**(2-3):305-327. DOI: 10.1080/13698249.2022.2092685

[63] Thundiparampil SJ. Empowerment of emotional and spiritual intelligence of the middle aged in coping mid-life transitions to promote active aging. Asian Journal of Nursing Education and Research. 2024;**14**(4):288-294. DOI: 10.52711/2349-2996.2024.00056

[64] Goodrick W, Pelser A. The greying of a rainbow nation: Policy responses to the implications of population ageing in South Africa. African Population Studies. 2014;**28**(1):648-660. DOI: 10.11564/28-0-522-648-660

[65] McQuaid K, Esson J, Gough KV, Wignall R. Navigating old age and the urban terrain: Geographies of ageing from Africa. Progress in Human Geography. 2021;**45**(4):814-833. DOI: 10.1177/0309132520948956

[66] MØller V, Ferreira M. Successful ageing in South Africa: Opportunity structures and subjective wellbeing. Southern African Journal of Gerontology. 1992;**1**(1):5-8. DOI: 10.21504/sajg.v1i1.10

[67] Madigele TJ. Socioeconomic determinants of successful aging in southern Africa: Socio-theological gerontology. Religion

and Development. 2024;**3**:34-60. DOI: 10.30965/27507955-20230033

[68] Kolbe-Alexander TL, Pacheco K, Tomaz SA, Karpul D, Lambert EV. The relationship between the built environment and habitual levels of physical activity in south African older adults: A pilot study. BMC Public Health. 2015;**15**(1):518. DOI: 10.1186/s12889-015-1853-8

[69] Pretorius E, Moonsamy S. Culture and mental health in South Africa. In: The Routledge International Handbook of Race, Culture and Mental Health. London, UK: Routledge; 2020. pp. 470-481

[70] Kelly G, Mrengqwa L, Geffen L. "They don't care about us": Older people's experiences of primary healthcare in Cape Town, South Africa. BMC Geriatrics. 2019;**19**(1):98. DOI: 10.1186/s12877-019-1116-0

[71] Peltzer K, Phaswana-Mafuya N. Physical inactivity and associated factors in older adults in South Africa: Geriatrics. African Journal for Physical Health Education, Recreation and Dance. 2012;**18**(3):447-460. Available from: https://hdl.handle.net/20.500.11910/3312

[72] Dev RD, Ismail IA, Omar-Fauzee MS, Abdullah MC, Soh KG. Emotional intelligence as a potential underlying mechanism for physical activity among Malaysian adults. American Journal of Health Sciences. 2012;**3**(3):211. DOI: 10.19030/ajhs.v3i3.7140

[73] Kelly G, Black R. The potential value of a geographic information system for public service planning for older people in the African region. International Journal of Care and Caring. 2023;**7**(2):364-372. DOI: 10.1332/239788221X16655372907511

[74] Stevenson E, Mutebi N. Healthy Ageing and Care for Older Populations. 2024. Available from: https://post.parliament.uk/healthy-ageing-and-care-for-older-populations/ [Accessed: July 10, 2025]

[75] Higgs P, Gilleard C. Generational conflict, consumption and the ageing welfare state in the United Kingdom. Ageing and Society. 2010;**30**(8):1439-1451. DOI: 10.1017/S0144686X10000425

[76] Nyqvist F, Cattan M, Andersson L, Forsman AK, Gustafson Y. Social capital and loneliness among the very old living at home and in institutional settings: A comparative study. Journal of Aging and Health. 2013;**25**(6):1013-1035. DOI: 10.1177/0898264313497508

[77] Ikpeme M, Pang D, Hoveling L. Physical activity determinants in older people: An analysis of the UK understanding society wave 2. European Journal of Public Health. 2021;**31**(Suppl. 3):ckab164.370. DOI: 10.1093/eurpub/ckab164.370

[78] Sartini C, Morris RW, Whincup PH, Wannamethee SG, Ash S, Lennon L, et al. Association of maximum temperature with sedentary time in older British men. Journal of Physical Activity and Health. 2017;**14**(4):265-269. DOI: 10.1123/jpah.2016-0468

[79] Wu YT, Luben R, Wareham N, Griffin S, Jones AP. Weather, day length and physical activity in older adults: Cross-sectional results from the European Prospective Investigation into Cancer and Nutrition (EPIC) Norfolk Cohort. PLoS ONE. 2017;**12**(5):e0177767. DOI: 10.1371/journal.pone.0177767

[80] Narushima M, Liu J, Diestelkamp N. Lifelong learning in active ageing discourse: Its conserving effect on wellbeing, health and vulnerability.

Ageing and Society. 2018;**38**(4):651-675. DOI: 10.1017/S0144686X16001136

[81] Delhom I, Satorres E, Meléndez JC. Emotional intelligence intervention in older adults to improve adaptation and reduce negative mood. International Psychogeriatrics. 2022;**34**(1):79-89. DOI: 10.1017/S1041610220003579

[82] O'Doherty M, Cunningham C, Neill RD, Tully MA. The association of resilience and physical activity in older adults: Cross-sectional analyses from the NICOLA study. Journal of Public Health. 2024:1-8. DOI: 10.1007/s10389-024-02274-3

[83] Wilson CA, Saklofske DH. The relationship between trait emotional intelligence, resiliency, and mental health in older adults: The mediating role of savouring. Aging and Mental Health. 2018;**22**(5):646-654. DOI: 10.1080/13607863.2017.1292207

[84] Liang Y, Huo M, Kennison R, Zhou R. The role of cognitive control in older adult cognitive reappraisal: Detached and positive reappraisal. Frontiers in Behavioral Neuroscience. 2017;**11**:27. DOI: 10.3389/fnbeh.2017.00027

[85] Nashiro K, Sakaki M, Mather M. Age differences in brain activity during emotion processing: Reflections of age-related decline or increased emotion regulation. Gerontology. 2012;**58**(2):156-163. DOI: 10.1159/000328465

[86] Fourie M, Gildenhuys GM, Shaw I, Shaw BS, Toriola AL, Goon DT. Effects of a mat Pilates program on flexibility in elderly women. Medicina dello Sport. 2013;**66**(4):545-543

[87] Hazlett-Stevens H, Singer J, Chong A. Mindfulness-based stress reduction and mindfulness-based cognitive therapy with older adults: A qualitative review of randomized controlled outcome research. Clinical Gerontologist. 2019;**42**(4):347-358. DOI: 10.1080/07317115.2018.1518282

[88] Robin N, Toussaint L, Sinnapah S, Hue O, Coudevylle GR. Beneficial influence of mindfulness training promoted by text messages on self-reported aerobic physical activity in older adults: A randomized controlled study. Journal of Aging and Physical Activity. 2019;**28**(3):406-414. DOI: 10.1123/japa.2019-0002

[89] Parra DC, Wetherell JL, Van Zandt A, Brownson RC, Abhishek J, Lenze EJ. A qualitative study of older adults' perspectives on initiating exercise and mindfulness practice. BMC Geriatrics. 2019;**19**(1):354. DOI: 10.1186/s12877-019-1375-9

[90] Lafrance Robinson A, McCague EA, Whissell C. "That chair work thing was great": A pilot study of group-based emotion-focused therapy for anxiety and depression. Person-Centered & Experiential Psychotherapies. 2014;**13**(4):263-277. DOI: 10.1080/14779757.2014.910131

[91] Yeo YTT, Chow JYA, Goh YS. Exploring the experiences of community-dwelling older adults participating in group interaction programs: A qualitative Meta-synthesis. Journal of Clinical Nursing. 2024:1-23. DOI: 10.1111/jocn.17563

[92] Doughty K. Walking together: The embodied and mobile production of a therapeutic landscape. Health and Place. 2013;**24**:140-166. DOI: 10.1016/j.healthplace.2013.08.009

[93] Izumi BT, Schulz AJ, Mentz G, Israel BA, Sand SL, Reyes AG, et al. Leader behaviors, group cohesion, and participation in a walking group

program. American Journal of Preventive Medicine. 2015;**49**(1):41-49. DOI: 10.1016/j.amepre.2015.01.019

[94] Fong ZH, Tan SH, Mahendran R, Kua EH, Chee TT. Arts-based interventions to improve cognition in older persons with mild cognitive impairment: A systematic review of randomized controlled trials. Aging and Mental Health. 2021;**25**(9):1605-1617. DOI: 10.1080/13607863.2020.1786802

[95] Pearce E. Participants' perspectives on the social bonding and well-being effects of creative arts adult education classes. Arts & Health. 2017;**9**(1):42-59. DOI: 10.1080/17533015.2016.1193550

[96] Watson B, Das A, Maguire S, Fleet G, Punamiya A. The little intervention that could: Creative aging implies healthy aging among Canadian seniors. Aging and Mental Health. 2024;**28**(2):307-318. DOI: 10.1080/13607863.2023.2246416

[97] Merriam SB, Kee Y. Promoting community wellbeing: The case for lifelong learning for older adults. Adult Education Quarterly. 2014;**64**(2):128-144. DOI: 10.1177/0741713613513633

[98] Ige-Elegbede J, Pilkington P, Gray S, Powell J. Barriers and facilitators of physical activity among adults and older adults from Black and Minority Ethnic groups in the UK: A systematic review of qualitative studies. Preventive Medicine Reports. 2019;**15**:100952. DOI: 10.1016/j.pmedr.2019.100952

[99] Odukoya OO, Odediran OO, Rogers CR, Ogunsola F, Okuyemi KS. Exploring the barriers and facilitators towards physical activity among church members in Lagos, Nigeria: A qualitative study. African Health Sciences. 2023;**23**(2):572-581. DOI: 10.4314/ahs.v23i2.66

[100] Casanova G, Weil J, Cerqueira M. The evolution of universities of the third age around the world: A historical review. Gerontology and Geriatrics Education. 2024;**45**(3):483-498. DOI: 10.1080/02701960.2023.2231375

[101] Fortune D, Butler B. Keeping isolation and loneliness at bay: How community centres can support belonging as we age. Leisure/Loisir. 2025;**49**(1):1-24. DOI: 10.1080/14927713.2023.2271949

[102] Portacolone E, Johnson JK, Halpern J, Kotwal A. Seeking a sense of belonging. Generations. 2020;**44**(3):1-8

[103] Estabrooks PA, Smith-Ray RL, Almeida FA, Hill J, Gonzales M, Schreiner P, et al. Move more: Translating an efficacious group dynamics physical activity intervention into effective clinical practice. International Journal of Sport and Exercise Psychology. 2011;**9**(1):4-18. DOI: 10.1080/1612197X.2011.563123

[104] Opia FN, Kayode A. Culturally sensitive interventions for mental health in vulnerable populations: Bridging gaps in care. International Journal of Research Publication and Reviews. 2025;**6**(1):2984-2997. DOI: 10.55248/gengpi.6.0125.0507

[105] Shaw BS, Shaw I, Brown GA. Self-reported dietary intake following endurance, resistance and concurrent endurance and resistance training. Journal of Sports Science and Medicine. 2008;**7**(2):255-259

[106] Klainin-Yobas P, Kowitlawakul Y, Lopez V, Tang CT, Hoek KE, Gan GL, et al. The effects of mindfulness and health education programs on the emotional state and cognitive function of elderly individuals with mild cognitive impairment: A randomized controlled

trial. Journal of Clinical Neuroscience. 2019;**68**:211-217. DOI: 10.1016/j.jocn.2019.05.031

[107] Stewart AL, Grossman M, Bera N, Gillis DE, Sperber N, Castrillo M, et al. Multilevel perspectives on diffusing a physical activity promotion program to reach diverse older adults. Journal of Aging and Physical Activity. 2006;**14**(3):270-287. DOI: 10.1123/japa.14.3.270

[108] Shaw I, Cronje M, Shaw BS. Group-based exercise as a therapeutic strategy for the improvement of mental outcomes in mild to moderate Alzheimer's patients in low resource care facilities. Asian Journal of Sports Medicine. 2021;**12**(1):1-6. DOI: 10.5812/asjsm.106593

[109] Hunter RH, Sykes K, Lowman SG, Duncan R, Satariano WA, Belza B. Environmental and policy change to support healthy aging. Journal of Aging & Social Policy. 2011;**23**(4):354-371. DOI: DOI. 10.1080/08959420.2011.605642

[110] Karimi L, Leggat SG, Bartram T, Rada J. The effects of emotional intelligence training on the job performance of Australian aged care workers. Health Care Management Review. 2020;**45**(1):41-51. DOI: 10.1097/HMR.0000000000000200

[111] Kemp CL, Bender AA, Ciofi J, Craft Morgan J, Burgess EO, Duong S, et al. Meaningful engagement among assisted living residents with dementia: Successful approaches. Journal of Applied Gerontology. 2021;**40**(12):1751-1757. DOI: 10.1177/0733464821996866

[112] Arnone R, Cascio MI, Parenti I. The role of emotional intelligence in health care professionals burnout. European Journal of Public Health. 2019;**29**(Suppl. 4):ckz186-553. DOI: 10.1093/eurpub/ckz186.553

[113] Kumari RB. Determinants of elderly well-being in Europe and Asia: A multidimensional review. International Journal of Innovative Science and Research Technology. 2025;**10**(4):3507-3514. DOI: 10.38124/ijisrt/25apr1737

[114] Suyono H. Integrating the elderly in society with lifelong learning programmes: Indonesian experiences. In: Education for the Elderly in the Asia Pacific. Singapore: Springer Nature Singapore; 2021. pp. 205-217

[115] Galvez-Hernandez P, Shankardass K, Puts M, Tourangeau A, Gonzalez-de Paz L, Gonzalez-Viana A, et al. Mobilizing community health assets through intersectoral collaboration for social connection: Associations with social support and well-being in a nationwide population-based study in Catalonia. PLoS ONE. 2025;**20**(3):e0320317. DOI: 10.1371/journal.pone.0320317

[116] Hanna GP, Noelker LS, Bienvenu B. The arts, health, and aging in America: 2005-2015. The Gerontologist. 2015;**55**(2):271-277. DOI: 10.1093/geront/gnu183

[117] De Figueiredo Queiros MM, Fernández-Berrocal P, Extrema N, Queirós PS. Actividad física en la tercera edad: Análisis de sus relaciones con la Inteligencia Emocional Percibida y los estilos de respuesta A la depresión. Ansiedad Y Estrés. 2006;**12**:293-303

[118] Dubnov G, Berry EM. Physical activity and mood. The endocrine connection. In: Endocrinology of Physical Activity and Sport. 2nd ed. Totowa, NJ: Humana Press; 2013. pp. 405-415

[119] Guszkowska M, Guszkowska M. Wpływ ćwiczeń fizycznych na poziom leku i depresji oraz stany nastroju [Effects of exercise on anxiety, depression and mood]. Psychiatria Polska. 2004;**38**(4):611-620

[120] Bernstein EE, McNally RJ. Acute aerobic exercise helps overcome emotion regulation deficits. Cognition and Emotion. 2017;**31**(4):834-843. DOI: 10.1080/02699931.2016.1168284

[121] Ali HS, Khanmohammadi R, Arabameri E, Shaw I, Shaw BS. Effect of Baduanjin Qigong and transcranial direct current stimulation on quality of sleep and disease impact in elderly patients with fibromyalgia: A randomised, sham-controlled study. Clinical and Experimental Rheumatology. 2025;**43**:1040-1048. DOI: 10.55563/clinexprheumatol/4e5i45

[122] Talley G, Shelley-Tremblay J. The relationship between mindfulness and sleep quality is mediated by emotion regulation. Psychiatry International. 2020;**1**(2):42-66. DOI: 10.3390/psychiatryint1020007

[123] Tashjian SM, Goldenberg D, Galván A. Neural connectivity moderates the association between sleep and impulsivity in adolescents. Developmental Cognitive Neuroscience. 2017;**27**:35-44. DOI: 10.1016/j.dcn.2017.07.006

[124] Shaw I, Shaw B, Brown G, Shariat A. Review of the role of resistance training and musculoskeletal injury prevention and rehabilitation. International Journal of Clinical and Experimental Medicine. 2016;**2016**:1-5

[125] Collins H, Booth JN, Duncan A, Fawkner S, Niven A. The effect of resistance training interventions on 'The Self' in Youth: A systematic review and meta-analysis. Sports Medicine - Open. 2019;**5**(1):29. DOI: 10.1186/s40798-019-0205-0

[126] Dionigi R. Resistance training and older adults' beliefs about psychological benefits: The importance of self-efficacy and social interaction. Journal of Sport and Exercise Psychology. 2007;**29**(6):723-746. DOI: DOI.org/10.1123/jsep.29.6.723

[127] Jette AM, Rooks D, Lachman M, Lin TH, Levenson C, Heislein D, et al. Home-based resistance training: Predictors of participation and adherence. The Gerontologist. 1998;**38**(4):412-421. DOI: 10.1093/geront/38.4.412

[128] Shaw I, Shaw BS, Brown GA. Concurrent training and pulmonary function in smokers. International Journal of Sports Medicine. 2011;**32**(10):776-780. DOI: 10.1055/s-0031-1277214

[129] Shaw BS, Shaw I, Mamen A. Contrasting effects in anthropometric measures of total fatness and abdominal fat mass following endurance and concurrent. Journal of Sports Medicine and Physical Fitness. 2010;**50**(2):207-213

[130] Fahmi PR, Parhan P, Alieffirdho ZM, Arief SM. Psychological impact of aerobic and resistance exercise in patients with heart disease. Competitor: Jurnal Pendidikan Kepelatihan Olahraga. 2024;**16**(3):992-997. DOI: 10.26858/cjpko.v16i3.67936

[131] Schonert-Reichl KA, Oberle E, Lawlor MS, Abbott D, Thomson K, Oberlander TF, et al. Enhancing cognitive and social–emotional development through a simple-to-administer mindfulness-based school program for elementary school children: A randomized controlled

trial. Developmental Psychology. 2015;**51**(1):52-66. DOI: 10.1037/a0038454

[132] Barragan C. Social relationships and the importance of community-based fitness programs (CBFP). Journal of Women & Aging. 2021;**33**(4):428-441. DOI: 10.1080/08952841.2021.1915685

[133] Slavin M. Towards growth-focused physical activity: Qualitative evaluation of a better future. Journal of Clinical Exercise Physiology. 2024;**13**(s1):16. DOI: 10.31189/2165-7629-13-s1.16

[134] Shandu NM, Mathunjwa ML, Shaw I, Shaw BS. Exercise effects on health-related quality of life (HRQOL), muscular function, cardiorespiratory function, and body composition in smokers: A narrative review. International Journal of Environmental Research and Public Health. 2023;**20**(19):6813. DOI: 10.3390/ijerph20196813

[135] Rusch A. Artificial emotional intelligence's potential in improving social wellness of older adults. Proceedings of the AAAI Symposium Series. 2025;**5**(1):293-295. DOI: 10.1609/aaaiss.v5i1.35603

[136] Sampedro-Piquero P, Alvarez-Suarez P, Begega A. Coping with stress during aging: The importance of a resilient brain. Current Neuropharmacology. 2018;**16**(3):284-296. DOI: 10.2174/1570159X15666170915141610

[137] Joo JH, Bone L, Forte J, Kirley E, Lynch T, Aboumatar H. The benefits and challenges of established peer support programmes for patients, informal caregivers, and healthcare providers. Family Practice. 2022;**39**(5):903-912. DOI: 10.1093/fampra/cmac004

[138] Fernández-Berrocal P, Checa P. Editorial: Emotional intelligence and cognitive abilities. Frontiers in Psychology. 2016;**7**:955. DOI: 10.3389/fpsyg.2016.00955

[139] Morgan SP, Lengacher CA, Seo Y. A systematic review of breathing exercise interventions: An integrative complementary approach for anxiety and stress in adult populations. Journal of Holistic Nursing: Official Journal of the American Holistic Nurses' Association. 2024:8980101241273860. DOI: 10.1177/08980101241273860