Supplementary materials

Definitions and detailed description of the scales used in the study

The University of Jyvaskyla Active Ageing Scale (UJACAS) is a quantitative scale for assessing active ageing that measures individuals' pursuit of active lifestyles (Rantanen et al., 2019). The UJACAS is designed to measure activity over the past four weeks. The scale comprises 17 items (scored from 0 to 4), organised into four domains: Goals, Activity, Ability, and Opportunity. The lowest score for each domain on the scale is 0, and the highest is 68. The total score for all domains on the scale ranges from 0 to 272 points. Higher scores indicate more active ageing. In the original UJACAS scale, reliability was assessed using Cronbach's alpha coefficient (α), which yielded α = 0.95 for the total scale, indicating excellent internal consistency. The Cronbach's alpha coefficient for the goals domain was α = 0.86; for the ability domain, α = 0.91; for the opportunities domain, α = 0.89; and for the activities domain, α = 0.80 (Demir Erbil and Hazer, 2019). Written permission was obtained from the authors of the UJACAS to use and adapt the scale into Serbian. In this study, the reliability of the total UJACAS scale was excellent, with an α value of 0.94. For the domains, reliability was satisfactory, ranging from 0.77 to 0.85.

The Maastricht Social Participation Profile (MSPP) (Mars et al., 2009) measures the frequency and diversity of social participation (i.e., the frequency and number of different types of social participation in which older adults engage) over the past four weeks. The MSPP consists of three subscales: social activity (9 items), contact with friends (8 items), and contact with family (8 items). Two scores can be calculated for each subscale: a diversity score and a frequency score. Higher scores indicate more diverse or more frequent social participation. In other studies, the instrument's reliability, as measured by Cronbach's alpha coefficient, was α = 0.91, while the Cronbach's alpha coefficients for the individual subscales ranged from 0.74 to 0.88 (Kukić et al., 2020). In the present study, the total MSPP demonstrated good internal consistency (α = 0.824), while Cronbach's alpha coefficients for the individual subscales ranged from 0.522 to 0.778.

The Geriatric Depression Scale (GDS) (Greenberg, 2012) is a widely used screening instrument for depressive symptoms in older adults, assessing their feelings and experiences during the preceding week. It includes 15 yes/no items that reflect a range of symptoms associated with depression, including depressed mood, lack of motivation, orientation to the past rather than the future, cognitive difficulties, obsessive features, and anxiety. Scores of 0–4 are considered normal; scores of 5–8 indicate mild depression; scores of 9–11 indicate moderate depression; and scores of 12–15 indicate severe depression. The GDS can be used in older adults who are healthy or have mild to moderate cognitive and physical impairments. It is useful for distinguishing depressed older adults from those who are not depressed. In other studies, reliability analyses of the GDS have revealed an internal consistency greater

than α = 0.80 (Egeljić-Mihailović et al., 2022). In the present study, the GDS demonstrated good internal consistency (α = 0.837).

The Katz Index of Independence in Activities of Daily Living (ADL) (Wallace et al., 2007) measures a respondent's ability to perform daily activities independently. It is used to assess functional status, identify problems in performing activities of daily living, and plan healthcare accordingly. The ADL ranks the adequacy of performance in six functions: bathing, dressing, toileting, transferring, continence, and feeding. In other studies, the instrument's reliability was moderate, with a Cronbach's alpha coefficient of α = 0.79 (Gerrard, 2013). In the present study, the ADL demonstrated relatively low internal consistency (α = 0.598), which should be interpreted in the context of the index's multidimensional functional structure and the nature of the individual activities assessed.

The Lubben Social Network Scale (LSNS-6) is a validated instrument designed to measure social isolation in older adults (Lubben et al., 2006). The LSNS-6 assesses the frequency and number of social contacts with friends and family. This instrument can be used to identify vulnerable individuals who experience social isolation or are at risk of becoming socially isolated (Vilar-Compte et al., 2018). In this study, a short version of the 6-item scale was used. The items were designed to measure social isolation among older adults in relation to family and friends. Higher scores indicate lower levels of social isolation. The Chinese version of the LSNS-6 demonstrated good internal consistency, with a Cronbach's alpha coefficient of α = 0.83. Additionally, the two subscales of the LSNS-6 demonstrated reliable internal consistency. Cronbach's alpha coefficient for the family subscale was α = 0.90, and α = 0.95 for the friends subscale (Chang et al., 2018). In the present study, the total LSNS-6 demonstrated good internal consistency (α = 0.862), while the family and friends subscales demonstrated excellent internal consistency (α = 0.898 and α = 0.917, respectively).

The Pearlin Mastery Scale (PM) measures the extent to which individuals perceive their lives as being under their control (Pearlin and Schooler, 1978). The scale consists of seven items rated on a seven-point response scale ranging from 1 (strongly agree) to 7 (strongly disagree). The scale includes positively and negatively worded items; negatively worded items are reverse-coded before calculating the total score. After reverse coding the negatively worded items, higher total scores indicate greater personal mastery and greater perceived control over one's life. Previous research has demonstrated good internal consistency of the scale, with a Cronbach's alpha coefficient of 0.87 (Chen et al., 2013). In the present study, the PM demonstrated relatively low internal consistency (α = 0.654).

The Self-Perception of Old Age Scale (SLO) measures individuals' self-perception of ageing. The SLO consists of 21 statements. Higher scores are considered to indicate a more negative self-perception of personal ageing. In other studies, the instrument's reliability was good, with a Cronbach's alpha coefficient of α = 0.83 (Mendoza-Núñez et al., 2018). In the present study, the SLO demonstrated good internal consistency (α = 0.882).

The Nursing Home Resident Satisfaction Scale (NHRSS) measures overall nursing home residents' satisfaction with the care they receive. The scale consists of three domains, each with three items, assessing relationships between physicians and residents, relationships between nurses and residents and the quality of care, and the nursing home environment. The NHRSS also includes one item assessing overall satisfaction with the care provided in nursing homes. In the original study, the internal consistency reliability of the instrument, as measured by Cronbach's alpha coefficient, was $\alpha = 0.69$ for physician services, $\alpha = 0.79$ for nursing services, and $\alpha = 0.74$ for the environment (Zinn et al., 1993). In the present study, Cronbach's alpha coefficients across the NHRSS domains ranged from 0.602 to 0.758. The physician services domain demonstrated the lowest internal consistency ($\alpha = 0.602$), whereas the total scale demonstrated satisfactory internal consistency ($\alpha = 0.757$).

The Mini-Mental State Examination (MMSE) (Folstein et al., 2011) is a brief cognitive assessment used to evaluate cognitive functions and determine the level of cognitive impairment. It consists of 11 tasks assessing orientation (time and place), attention, memory, language, writing, and visuospatial abilities. It was used to assess cognitive functioning and to identify older adults who met the study's inclusion criteria. The reliability of this instrument in other studies has also been found to be good, with a Cronbach's alpha coefficient of $\alpha > 0.70$ (Egeljić-Mihailović et al., 2022).