

**Purpose:** Some types of sedentary behaviors tend to cluster in individuals or groups of older adults. Insight into how these different types of sedentary behavior cluster is needed, as recent research suggests that not all types of sedentary behavior may have the same negative effects on physical and mental health. Therefore, the aim of this study was to identify sex-specific typologies of older adults' sedentary behavior, and to examine their associations with health-related and socio-demographic factors.

**Methods:** Cross-sectional data were collected as part of the BEPAS Seniors, and the Busschaert study among 696 Flemish older adults (60+). Typologies of self-reported sedentary behavior were identified using latent profile analysis, and associations with health-related and sociodemographic factors were examined using analyses of variances.

**Results:** Five distinct typologies were identified from seven sedentary behaviors (television time, computer time, transport-related sitting time, sitting for reading, sitting for hobbies, sitting for socializing and sitting for meals) in men, and three typologies were identified from six sedentary behaviors (television time, transport-related sitting time, sitting for reading, sitting for hobbies, sitting for socializing and sitting for meals) in women. Typologies that are characterized by high television time seem to be related to more negative health outcomes, like a higher BMI, less grip strength, and a lower physical and mental health-related quality-of-life. Typologies that are represented by high computer time and motorized transport seem to be related to more positive health outcomes, such as a lower body mass index, more grip strength and a higher physical and mental health-related quality-of-life.

**Conclusions:** Although causal direction between identified typologies and health outcomes remains uncertain, our results suggests that future interventions should better focus on specific types of sedentary behavior (e.g. television time), or patterns of sedentary behavior, rather than on total sedentary behavior.