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# ACTIVE AND HEALTHY AGEING IN EUROPE

Significance of social relationships

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## Akademisk avhandling

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Stockholms Universitet, Institution för Folkhälsovetenskap, Stockholm.

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Active and healthy ageing in Europe – Significance of social relationships

**Abstract**

**Background:** Social relationships have important roles in achieving healthy and active ageing. Social relationships are dynamic across the life course. A myriad of contextual and individual (e.g., sociodemographic and health-related) factors shape the levels of social relationship constructs (e.g., social contact, participation, and support) and how they change over time. This thesis aims to contribute to a better understanding of social relationships among the older European population, the impact of health on social relationships, the influence of social relationships on quality of life, and the impact of the COVID-19 pandemic on the levels of social relationships.

**Methods:** The study subjects were community-dwelling Europeans aged 50 and over who participated in the Survey of Health, Ageing and Retirement in Europe (SHARE) between 2004 and 2020. In Sub-study 1, multilevel growth modelling was used to analyse the trajectories of seven social relationship constructs, i.e., provision and receipt of instrumental support, social contact, and participation in volunteer work, sport/social club, educational activity, and political/community organisation. Sub-study 2 used latent class analysis (LCA) to identify social relationship typologies based on the seven social relationship constructs and perceived emotional support. Next, the associations between frailty and social relationship typologies were analysed using LCA-with-covariates. Sub-study 3 evaluated the possible causal effect of social support provision, support receipt, and participation on quality of life using doubly robust estimation and sensitivity analysis for unobserved confounding. Sub-study 4 used multilevel logistic regression analysis to determine whether individuals' exposure to COVID-19 and the country's COVID-19 policies stringency index (S-Index) were associated with the initiation of provision and receipt of instrumental support and volunteering during the first phase of the COVID-19 pandemic.

**Results:** In contrast to instrumental support receipt, the probability of instrumental support provision, social contact, and participation declined slightly over time (Sub-study 1). Four social relationship types were identified: 1) poor, 2) frequent and emotionally close, 3) frequent, emotionally close, and supportive, and 4) frequent, emotionally close, and active (Sub-study 2). Poor self-rated health limited instrumental support provision and increased instrumental support receipt from outside the household (Sub-study 1). Being pre-frail or frail was associated with less active social relationship types, i.e., Types 1, 2, and 3 (Sub-study 2). Social participation and instrumental support provision for people outside the household were correlated with a higher quality of life while receiving instrumental support was associated with a lower quality of life. None of these associations could be considered causal (Sub-study 3). During the COVID-19 pandemic, the level of volunteering and instrumental support provision was lower, but the level of instrumental support receipt was higher than before the pandemic. Being exposed to COVID-19 was positively associated with support receipt initiation. The close ones' exposure to COVID-19 was positively associated with volunteering, support provision, and support receipt. S-Index was positively associated with instrumental support provision initiation but negatively associated with support receipt initiation (Sub-study 4).

**Conclusions:** A significant share of older Europeans was socially active. Their engagement in social contact, support, and participation changed over time. The four social relationship types revealed the importance of having frequent contact in initiating instrumental support exchange and social participation. Health is a vital determinant of older adults' social relationships. On the other hand, observed associations indicate that social relationships may influence older adults' quality of life. The pandemic might lower social support provision and volunteering and increase support receipt levels in the population. However, the pandemic might also encourage older adults to provide help, likely to people within their neighbourhood. Overall, maintaining close social ties, especially with family and close friends, is important to stimulate active engagement in social support exchange and participation, which promotes healthy ageing.

**Key words:** older population, ageing, social relationships, social support, social participation, social contact, quality of life, frailty, panel data, latent class analysis, growth model, multilevel logistic regression, pandemic, Europe, SHARE

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