

Robots for the Elderly at Home: For Men Only

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Abstract : Our research focuses on the question of whether assistive and social robotics could pose a promising strategy to support the independent living of elderly people and potentially relieve relatives of any anxieties. To answer the question of how elderly people perceive the potential of robotics, we analysed the data from the Berlin Aging Study BASE-II (<https://www.base2.mpg.de/de>) (N=1463) and data from the German SYMPARTNER study (<http://www.sympartner.de>) (N=120) and compared those to a control group made up of people younger than 30 years (BASE II: N=241; SYMPARTNER: N=30). BASE-II is a cohort study of people living in Berlin, Germany. The sample covers more than 2200 cases; a questionnaire on the use and acceptance of assistive and social robots was carried out with a sub-sample of 1463 respondents in 2015. The SYMPARTNER study was done by SIBIS institute of Social Research, Berlin and included a total of 120 persons between the ages of 60 and 87 in Berlin and the rural German federal state of Thuringia. Both studies included a control group of persons between the ages of 20 and 35 (BASE II: N=241; SYMPARTNER: N=30). Additional data, representative for the whole population in Germany, will be surveyed in fall 2017 (Survey "Technikradar" [technology radar] by the National Academy of Science and Engineering). Since this survey is including some identical questions as BASE-II/SYMPARTNER, comparative results can be presented at 20th International Conference on Social Robotics in New York 2018. The complexity of the data gathered in BASE-II and SYMPARTNER, encompassing detailed socio-economic background characteristics as well as personality traits such as the personal attitude to risk taking, locus of control and Big Five, proves highly valuable and beneficial. Results show that participants' expressions of resentment against robots are comparatively low. Participants' personality traits play a role, however the effect sizes are small. Only 15 percent of participants received domestic robots with great scepticism. Participants aged older than 70 years expressed greatest rejection of the robotic assistant. The effect sizes however account for only a few percentage points. Overall, participants were surprisingly open to the robot and its usefulness. The analysis also shows that men's acceptance of the robot is generally greater than that of women (with odds ratios of about 0.6 to 0.7). This applies to both assistive robots in the private household and in care environments. Men expect greater benefits of the robot than women. Women tend to be more sceptical of their technical feasibility than men. Interview results prove our hypothesis that men, in particular of the age group 60+, are more accustomed to delegate household chores to women. A delegation to machines instead of humans, therefore, seems palpable. The answer to the title question of this planned presentation is: social and assistive robots at home robots are not only accepted by men - but by fewer women than men.

Keywords : acceptance, care, gender, household

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