Engaging citizen stakeholders on the topic of social robotics in healthcare

R. A. Søraa, Y. Cheng, M. Kharas, S. Moratti

Purpose Social robotics is an area of gerontechnology that holds much promise to older adults (Broekens et al., 2009; Merkel & Kucharski, 2019; Peine et al., 2021). In the European Union Horizon 2020 project Robotics4EU we have investigated how a diverse selection of citizen stakeholders reflect on the possibility of robots playing a larger role in their life, especially regarding health and care. The average citizen has little knowledge about robots and little say in how they are developed or implemented. Robotics4EU sets out to change that, by making robot knowledge more accessible to a wider societal audience, to gain citizen feedback on what robots can and cannot do. These sorts of investigations are an important aspect of the shift to a more technologized welfare models for ageing societies, especially in Western and East Asian countries. **Method** We base our study on citizen engagement activities from the project with a triangulation of several data sources: (1) an array of scoping workshops, involving 700+ participants around Europe, the United States, and South Korea, where normal citizens and laypeople invited guests to their own homes or workplace to discuss the topic of social robots. Multiple diversity characteristics were considered when recruiting participants and analyzing data, including age. We specifically targeted older adults (in their 60s and 70s) to better gauge what wishes and concerns the different age groups had on this novel technology. In our data analysis we pinpoint what older adults, as well as other age groups, give feedback on regarding robots as gerontechnological solutions for their own lives. **Results and Discussion** Our main results reinforce some already established findings from previous research, namely that laypeople have little to no prior knowledge about robots and that skepticism is not particularly high. Importantly, citizen engagement has several pitfalls (e.g. tokenism, reliance on knowledge intermediaries, and reinforcement of social hierarchies and exclusion) as well as beneficial outcomes (e.g. empowerment and agency and greater social cohesion across groups) (Gaventa & Barrett, 2012, p. 2400). However, we did find that through exposure to robotic examples, laypeople became more aware of the different ethical and societal challenges that robots bring, potentially leading to more informed consumers and care receivers. As the methodology of citizen engagement is a generalist first approach to getting familiarized with a topic that one might not be an expert of, the main result was raised awareness of robots, and what they can imply for the citizens' future healthcare concerns. However, we did observe that knowledge brought forth a more critical awareness of potential negative barriers of robots, as well as new insight from the citizens on how robots might benefit them. Another main finding is that although robots are produced and new ones are introduced in great numbers annually, (for example, multiple novel robotic systems went into widespread use as pandemic mitigation measures), we lack a maturity scale for assessing robotic solutions. We will discuss the beginning stages of how a maturity assessment model could be developed.

References

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