Non-technical Obstacles to the Social Acceptance of Socially Assistive Robots (SARs) in Healthcare

Öznur Karakaş

Department of Interdisciplinary Studies of Culture
NTNU, Norwegian Science and Technology University Trondheim, Norway oznur.karakas@ntnu.no

Roger A. Søraa

Department of Interdisciplinary Studies of Culture
NTNU, Norwegian Science and Technology University Trondheim, Norway roger.soraa@ntnu.no

Abstract— This paper discusses ethical, socio-economic and legal obstacles to the social acceptance of socially assistive robots (SARs) in the context of the healthcare sector, based on data from 14 interviews with robotics experts from 6 European countries, and a series of workshops conducted on the use of robots in the healthcare sector. The findings of the study call for further research on the impact of different design solutions on the social acceptance of SARs. They also highlight certain concerns regarding the social acceptance of SARs. The main ethical concerns involve loss of human autonomy, machine manipulation and unpredictability, while the legal concerns mostly revolve around data privacy, data protection and data security. They coincide with the socio-economic problems of high cost of robots, human obsolescence, and concerns over the need for upskilling healthcare staff. An overall analysis of these findings indicates the need for clear guidelines to specify the locus of responsibility in care practices that involve SARs.

Keywords— SARs, robots, healthcare, ethics, social acceptance