

ORAL PAPER PRESENTATION 3: PHYSICAL AND MENTAL HEALTH

Can telepresence robots empower people with mental health conditions and intellectual disabilities in everyday life?

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Purpose The COVID-19 pandemic has illustrated the need to improve mental health services for elderly, people with mental health conditions or intellectual disabilities (WHO, 2021). The objective is to live a self-determined, autonomous life and to be empowered and integrated in society (WHO, 2021). In Germany, deinstitutionalisation of mental health care has been accompanied by the rise of counselling and care services that assist these target groups with household chores and other needs, but also provide services that enable social inclusion and participation (DGPPN, 2018). For recipients of these services, a structured daily routine provides stability (Gold et al., 2018). Service providers should use empowering approaches that use and promote the resources of people with mental health conditions (clients) and encourage self-determined decision making (Gold et al., 2018; Schädle-Deininger, 2010). To what extent can new technologies, such as telepresence robots, support these tasks, e. g. in the field of communication and housekeeping activities (Isabet et al., 2022)? In the project 'EmpowermentAssistant (Teilhabe-Assistenz)', the telepresence robot Temi (Fig. 1) is used in assisted living for people with mental health conditions and intellectual disabilities. For this purpose, Temi will be equipped with a software toolbox that promotes empowerment, supports independence and strengthens digital literacy. **Method** Within the framework of an explorative participatory study design, the robotic use will be examined through mixed methods and triangulation (Döring & Bortz, 2016; von Unger, 2014). A requirement analysis was conducted, consisting of three focus groups with 8 professionals, 2 clients, and 2 stakeholders as well as one expert interview, which will be interpreted using qualitative content analysis (Mayring, 2015). Subsequent project phases include iterative data collection in the form of field observations, qualitative interviews, and standardized survey instruments to obtain information on social interaction with the telepresence robot, technology acceptance, and usability. **Results and Discussion** Initial results of the requirement analysis show the relevance of structuring everyday life and the importance of strengthening these skills. The possibility to use the telepresence robot for this context is confirmed. Therefore, a toolbox with the applications "Digital Participation", "Digital Assistance" and "Digital Care" will be developed. The robotic software will remind clients of appointments and household chores. One example is the 'Happy Washday': Temi will encourage clients to use the washing machine and provides a step-by-step explanation. Tasks, e.g. of the weekly schedule, can be checked off and thus become visible and verifiable for the staff. Temi's telepresence feature will allow video conferencing between clients and professional staff. The staff can communicate, move and navigate Temi through the home, monitoring the situation via the robot. The next step is to test each software application in different pilot scenarios.

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Figure 1: The robot platform Temi (Picture: Medisana)