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Supporting medication intake of the elderly with robot technology

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SHORTEST SUMMARY

- RITA is a robot to assist the elderly in daily activities.
- We developed and evaluated an interface for RITA.
- Participants found it difficult to work with more advanced interface settings.
- Elderly are willing to accept assistance of a robot with this task.
- Testing of usability aspects during the design process is vital for a well-designed robot.

AIM OF THE STUDY

- To develop a robot interface to assist the elderly with their medication intake.
- To investigate whether the target group is willing to accept medication intake assistance from a robot.

MAIN RESULTS OF USER STUDY

Usability test
- The majority of participants in this study (17 out of 19) were able to take their medication with assistance of the interface.
- Participants found it difficult to work with more advanced interface settings.
- Post-Study Usability Questionnaire (Likert 5-point scale).
- Users rated usability positively.
- Mean score of 3.9 (between ‘Neutral’ and ‘Agree’).

Robot Acceptance
- Robot Acceptance Questionnaire (Likert 5-point scale).
- User accepted help from the robot.
- Mean score of 3.5 (‘Neutral’).

CONCLUSIONS & RECOMMENDATIONS

Conclusion
- The basic functionality of the interface was easy to use for the elderly for assistance with the medication intake task.
- Elderly are willing to accept assistance of a robot with this task.

Recommendations
- Interfaces for the elderly should really be as simple as possible.
- Testing of usability aspects during the design process is vital for a well-designed robot.

REFERENCES


