

27th International conference on

Neurology and Cognitive Neuroscience

October 18-19, 2018 | Warsaw, Poland

The possibility of using intelligent robots for the prevention of dementia in the elderly

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Introduction: The pretest in this study verified the correlation between psychological stress and cognitive ability. Given that this is the case, finding techniques to relieve stress in the elderly is desirable as a means for improving their cognitive ability and potentially preventing dementia. Prior research in robot therapy has verified the psychological effectiveness of communication between elderly people and intelligent robots. Against this background, the present study examines the possibility of using robots to stimulate the intellectual activity of the elderly. Specifically, a survey was conducted to investigate the attitudes of the elderly toward robot therapy.

Methods: A questionnaire concerning the use of robot therapy was given to a group of elderly participants in a health promotion program.

Results: The responses of 62 participants (28 male, 34 female) were analyzed. The average age of the subjects was 67.7±5.3 years. Asked how they thought robots might be used, 24 respondents indicated that robots could be used as partners in conversation, 15 indicated that they could be used for heart-to-heart exchanges and healing, 8 indicated singing and dancing together, four indicated brain training, and four indicated helping with body care.

Discussion & Conclusion: Elderly people are open to the use of intelligent robots as partners in conversation, singing, and healing. The results are consistent with previous studies; this type of attachment has the potential to promote psychological healing and comfort. The next challenge is to confirm the positive influence of robot therapy on cognitive functions.

Recent Publications

1. Sawami K, Kimura M, et al. (2017) Achievement of brain training course for the elderly. *J Health Educ Res Dev*. 5:2.
2. Sawami K, Kimura M, et al. (2017) Verification of the impact of storage by the rhythm phrase to be repeated. *SF J Geriatrics Pallia. Care* 1:1-6.
3. Sawami K, Okazaki T, et al. (2017) Intervention for elderly people to prevent stress and cognitive decline in subjects. *Current Opinions in Neurological Science* 1(1):44-52.
4. Sawami K, Kitamura T, et al. (2017) Relationship between cognitive function, vascular age and stress. *International Journal of Case Studies in Clinical Research* 1(4):89-95.
5. Sawami K, Nakagawa H, et al. (2017) Verification of preventive effect of dual-task and n-back task incorporated music therapy against dementia. *Neurochemistry & Neuropharmacology* 3:1-5.

Biography

Kazue Sawami is a Professor at Nara Medical University, Japan. She has completed her PhD in Health Science. Her research is about the cognitive abilities of elderly people.

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