

sum of perceived usefulness, perceived ease of use, and perceived adaptability (Heerink et al., 2010; Xu et al., 2015). The independent variable was the cognitive ability of participants to report on their own. The moderating variable was the age-friendly environment sum of physical, service-side, and cultural conditions. Multiple regression analysis was conducted to determine the relation between cognitive ability and the attitude towards gerontechnology. The moderating effect was then analyzed using PROCESS macro and bootstrapping. Results show that cognitive ability has a positive effect on the attitude towards gerontechnology, and the age-friendly environment has softened its effectiveness. When participants were living in a more age-friendly environment, their attitude toward gerontechnology was less affected by their cognitive ability. However, when age-friendly environmental condition scores above 62 (out of 75), the environmental aspect did not affect the association between cognitive ability and attitudes to gerontechnology. This study suggests that the age-friendly environment can narrow the disparity of the attitude towards gerontechnology depending on the cognitive capability levels under certain conditions. Regarding the attitude towards technology may affect the actual use, the possibility of environmental help is meaningful.

TRUST WITH AUTONOMOUS INTELLIGENCE SYSTEMS TO PROMOTE ADOPTION IN ASSISTIVE TECHNOLOGIES: A LITERATURE REVIEW

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While advancements in machine learning are increasing rapidly, very little progress has been made in its mass adoption despite its benefits in assistive technologies for older adults. By examining how users interact with smart technologies, characteristics of trust can be identified and enhanced to increase adoption of the next generation of assistive systems. The current study conducted a literature review to understand better how trust with autonomous systems is formed and maintained. Twenty-two pertinent articles were identified in which three themes emerged. First, people tend to forgive human errors more than errors made by machines -- meaning mistrust is exaggerated when systems make mistakes. Second, the development of trust depends on how the system solves the tasks it is assigned, for instance if a user does not believe the system acted in an "ethical way," distrust may form and the continuation of adoption is decreased. Lastly, trust depends on the situation and the risk/reward associated with using the system, for example the trust needed to board an autonomous plane differs from that for a simple grammar correction. Taken together, the black box ideology of autonomous systems may be an issue that prevents trust in them to be formed and maintained. Promising future directions are to create machine language translators that improve transparency of autonomous system behaviors (i.e., explainability). Even if assistive technologies are created to aid older adults -- the lack of focus on understanding the factors that foster trust may dampen their actual use.

USING SMART SPEAKERS IN LOW-INCOME SENIOR HOUSING TO ENHANCE THE AGING IN PLACE EXPERIENCE: STAKEHOLDER VIEWS

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Smart speakers provide a platform that can integrate smart home technology and/or safety devices within the home to enhance quality of life and independent living for older adults. However, few attempts to utilize this technology specifically within low-income senior housing (LISH) residents have been documented. Our purpose was to explore different stakeholder perceptions about the use of smart speakers to support aging in place in older adults living alone in LISH. Smart speakers were deployed in individual LISH apartments, equipped with a voice technology-based aging in place solution for the facility. A qualitative analysis of semi-structured interviews using a constant comparative approach for emerging themes was conducted (n=10: older adult users, n=2: housing staff, n=2: voice technology developers). The three participant groups showed diverging perceptions in terms of benefits, uses, and stakeholder interests. Older adults found smart speakers useful in four main areas: assistance with daily tasks, feeling connected, safety measures, and emotional wellbeing. The two other groups showed a broader interest in the use of the smart speaker device, such as residential management tools and communication channels in addition to its potential use as safety and wellness tools. Older adults experienced significant difficulty setting up desired functions or finding instructions, which restricted utilization of the technology to a limited set of tasks. All stakeholder groups addressed a need for formal training or personalized tech support for older adult users. Findings indicate the importance of developing deployment strategies tailored to the needs and characteristics of the target user group.

VOICES OF CAREGIVERS: KEY DEMANDS TOWARDS AI-DRIVEN HOME MONITORING IN COMMUNITY-BASED DEMENTIA CARE

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While most people with dementia prefer to live at home for as long as possible, this also puts more pressure on both their informal and formal care network. To provide support in home-based dementia care, there is growing interest in technology that allows caregivers to remotely monitor health and safety of people with dementia. Novel generations of these technologies are using non-wearable, pervasive sensors coupled with algorithms to continuously collect and model meaningful in-home information. However, while these self-learning monitoring systems develop rapidly, their target users' views and demands are still insufficiently mapped out. To identify possible barriers to acceptance and ways to overcome these, we conducted a scenario-based study, including semi-structured interviews with informal caregivers (n=19)