# A review of article entitled “Person-centered care and engagement via technology of residents with dementia in aged care facilities”

Jian Zhang, PhD student, department of psychiatry and behavioral science, Juntendo university

- Dementia patients often suffer from behavioral and psychological symptoms, and several trials indicate that certain activities can reduce anxiety and depression symptoms while improving quality of life.
- Touchscreen technology (TT) could provide an accessible and easy-to-use format by implementing a range of ‘apps’ to improve quality of life for those with dementia
- The introduction and training of TT in nursing homes is urgently needed to improve staff members’ confidence and competence using the technology.

This paper summarizes the work of Goh et al. (2017) entitled *Person-centered care and engagement via technology of residents with dementia in aged care facilities* published in *International psychogeriatrics*.

Touchscreen technology (TT) has been utilized in dementia patient care for the past decade. Mainstream research has primarily focused on the benefits for patients and previous barriers before TT implementation. Screen monitors provided clear and direct instructions to patients on how to use computers and accessory devices in the study, so there were relatively few reported operational barriers. Investigators emphasized the interaction between the machines and the patients. With the increasing popularity of tablets, like the iPad, there has been a surge of applications developed for 'training' dementia patients in clinics and facility care settings. However, considering the advanced age of the patients, a significant portion of them lack the capability to navigate and utilize tablets, which also poses a challenge for nursing home workers.

Numerous previous studies focusing on TT (Touchscreen Technology) in dementia patients and caregivers have indicated that following TT intervention patients have decreased responsive behaviors, increased engagement in activities, and improved social connections, including building rapport with staff. On the other hand, barriers such lack of confidence using the tablet, impaired independent use, requiring assistance from staff, difficulty holding the tablet, and staff concern regarding patient inefficient technical skills were reported (Bradley et al., 2023; Hung et al., 2021).

Thus, researchers have noted that enhancing caregivers' knowledge about TT should be a top priority.

Goh and colleagues (2017) conducted a single-arm, longitudinal observation study. Investigators designed a 40-minute educational session aimed at building confidence and enhancing TT skills for participants. Seventeen staff members (comprising 6 personal care attendants, 5 registered nurses, 4 enrolled nurses, 1 allied health professional, and 1 domestic staff member) from two facilities (residential aged care facilities and psychogeriatric nursing homes) attended the educational sessions. All participants had previously been involved in a study investigating the use of TT and had identified the need for training or education due to a lack of confidence. All 17 participants completed the pre-education session questionnaires, and 12 of them responded to post-education session questionnaires. The anonymous questionnaires consisted of 13 questions, including 5 Likert questions and 1 multiple-choice question describing the usefulness of the session and its impact on staff confidence.

The results revealed that participants reported increased self-confidence after the education session and engaging with residents using TTs, including patients with dementia or cognitive impairment. However, there were no statistically significant differences between pre-and post-education session data regarding staff confidence in their own ability to use TT devices; their interest in using TT devices with residents; nor their perception of the usefulness of TTs in caring for residents, especially those with dementia.

As the authors pointed out, there were limitations, including the relatively small sample size and the requirement for questionnaire optimization. Furthermore, it is worth noting that five participants did not provide responses to the post-questionnaire; gaining insight into the reasoning for their non-response and potentially revealing their identities would be beneficial.

Nevertheless, this study evaluating an educational intervention for paid caregivers in a dementia care facility is highly meaningful and pragmatic. There is a widespread perception that older adults with dementia may encounter difficulties when using electronic devices. Conversely, caregivers, typically in the 40-60 age range, might also grapple with advanced technology, which is a factor often underestimated. It is essential to recognize that caregivers play a pivotal role in enhancing the lives of dementia patients and directly influencing their well-being. If facility caregivers are hesitant to introduce new devices to patients due to their own lack of confidence or

technological knowledge, patients might miss out on potential benefits. This study underscores the vital need for comprehensive and beneficial educational sessions.

## References


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Jenny Zhang is a doctoral student at department of psychiatry and behavioral science, Juntendo university (Tokyo, Japan). She graduated from Hunan university of Chinese medicine in 2011, and was licensed as traditional Chinese medicine doctor in 2013. Now she focuses on cognitive stimulation therapy for dementia patients.