

ORAL PAPER PRESENTATION 3: PHYSICAL AND MENTAL HEALTH

A functional approach to measuring acceptance of social robots among elderly singletons in hong kong and singapore: protocol review of a purposeful sampling study

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Purpose Given the rapidly ageing nature of our global population, policy makers around the world are now more actively promoting active ageing. Researchers have begun exploring the use of assistive technologies in the form of social robots as companions for older persons to address their psychosocial needs, a key component of active ageing. However, there has been limited evidence on the efficacy of such social robots, especially in the Asian context. This article elucidates the protocol of a study to investigate the acceptance and quality of interaction between a Japanese social robot, LOVOT, and elderly singletons in Singapore and Hong Kong. **Method** In this mixed-method study design, 15 elderly singletons from Singapore and another 15 from Hong Kong were recruited: participants were 60-75 years of age, living alone, and had no known cognitive or mental issues. The primary outcome measure is the participants' differences in responses to and acceptance of LOVOT prior to and following their interaction with the robot, as outlined in the baseline assessment: the Qualtrics survey measured the participants' technology acceptance (Chen & Lou, 2020), loneliness (Russell, 1996), older people's quality of life (Bowling et al., 2013 & Herdman et al., 2011), subjective happiness (Lyubomirsky & Lepper, 1999), cultural inclinations, willingness to pay, and demographic characteristics, along with the LOVOT's sociability (Heerink et al., 2010) and system usability (Brooke, 1996). During the first session, participants were interviewed about their opinions on gerontechnology, social robots, and pets. Following the interview, participants were given 15 minutes to freely interact with LOVOT. This interaction was succeeded by a Qualtrics survey and interview to measure the elders' acceptance and attitudes toward LOVOT. The interaction, post-interaction survey and interview, was repeated for two subsequent sessions for a total of three interactions with LOVOT. The study was conducted in both Singapore and Hong Kong. **Results and Discussion** This review outlines the protocol of a pioneer study investigating the efficacy of the social robot, LOVOT, as companions for older persons in Singapore and Hong Kong. Such studies introduce innovative solutions to improving the psychosocial health and engagement of older adults. This protocol can be adapted to explore the efficacy of these assistive technologies in other elder care settings as well.

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