

## **506 - Methodologies used to study the feasibility, usability and effectiveness of social robots in clinical and social care settings for elderly adults**

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**Background:** In a search for innovative dementia care strategies, a new research fields have been dedicated to design social robots for older adults with cognitive impairments and dementia in order to promote their quality of life through communication and social interactions. Although the results are promising, the quality of studies on effectiveness of social robots in elderly adults is still low due to several methodological limitations (1). Then, we aim to review the methodologies used so far for conducting studies with social robots in clinical and social settings with people with dementia and elderly adults.

**Method:** Searches in Medline (PubMed), Web of Science, PsycInfo, and Cinahl yielded 33 studies included in the final review after applying inclusion and exclusion criteria. Reviews were conducted by two authors independently.

**Result:** Across 33 papers, 23 different social robots were examined on elderly adults and PwD, investigating feasibility, usability and effectiveness. A variety of study designs such as RCTs, mixed methods, cross-sectional and cohort were employed. Individual and group-based interventions took place in private households, LTCFs and labs within a single session or multiple sessions. Data were collected through observation, questionnaires, interview and physiological tests. Most revealed improvements were found in mood, engagement and participation. However, improvements in QoL, depression and cognition were not significant.

**Conclusion:** Despite the promising results, due to the insufficient methodology, failures and ambitious findings remain within the many aspects of the enquiry. Appropriate RCT designs with large sample sizes and individual intervention sessions might be established for effectiveness studies. For feasibility/usability studies, a cohort design with long-term intervention would serve best. We also

recommend a mixed method of data collection for any of three effectiveness, feasibility and usability study aims. Multiple interaction sessions running for more than one month might help researches to draw significant results and reveal the long-term impact of the robots.

## **507 - Stressful past events and emotional intelligence as predictors of Successful aging**

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### **Abstract**

**Objectives.** It has been widely demonstrated that recent stressful events could impact wellbeing, nevertheless it is not clear whether stressful situations experienced in the past and the internal resources used to deal with them can also influence older adult's well-being. The purpose of this study was to evaluate the influence of stressful past events and emotional intelligence on negative affect, and to determine whether negative affect is related to older people's wellbeing.

**Method.** The Aging in Spain Longitudinal Study, Pilot Survey (ELES-PS) database was used. The sample comprised 1747 participants (55.9% women), with ages between 50 to 98 years-old ( $M = 66.2$ ,  $SD = 10.6$ ). Stressful past events were evaluated with a list of ten stressful events developed by the project team. Three items of the Trait-Meta-Mood scale were used to assess emotional intelligence. In order to evaluate negative emotions, the PANAS scale of negative experience was used. Finally, life satisfaction was assessed using the Personal Wellbeing Index.