

Developing a telehealth-based assessment battery for older Australians

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Clinical Psychology

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Biographical statements

Simon Mierendorff is a second-year Masters of Clinical Psychology student at the University of Newcastle. He received a bachelor's degree in psychology and a master's degree in Business Psychology, also from the University of Newcastle. He is interested in aging, rural and remote healthcare, and complex mental health.

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Declarations

Statement of Originality

This thesis contains no material which has been accepted for the award of any other degree or diploma in any university or other tertiary institution and, to the best of my knowledge and belief, contains no material previously published or written by another person, except where due reference has been made in the text. I give consent to this copy of my thesis, when deposited in the University Library**, being made available for loan and photocopying subject to the conditions of the Copyright Act 1968.

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Acknowledgement of Collaboration

I hereby certify that the work embodied in this thesis has been done in collaboration with other researchers. I have included as part of this thesis a statement clearly outlining the extent of collaboration, with whom and under what auspices.

I contributed to the development of the research question, the database search, the statistical analysis, the interpretation of results and writing of the manuscript. Dr Michelle Kelly contributed to the development of the research question, the formulation of the methodology and selection of assessment measures, participant recruitment, the interpretation of results, and editing of the manuscript. Dr Kylie Wales contributed to the selection of assessment measures and provided training in administration.

Signed:

Simon Mierendorff

Date

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Abstract

Telehealth technologies can provide important healthcare services for people in rural and remote areas. In older adults, cognition, social cognition, mood, and functional independence are key predictors of dementia, however few assessment tools are validated for telehealth administration. This study examined the agreement between face-to-face and telehealth administration of five assessments: ACE-III, BASS, HADS, MBI, and ALSAR-R2. Thirty-nine healthy participants (18 male) over 50 years of age ($M = 71.9$, $SD = 11.7$) were randomized to face-to-face-first or telehealth-first test format, followed by the alternate format within five weeks. Eligible participants completed all assessment items, and telehealth was well tolerated. High mean intra-class correlations ($ICC = .913$ to $ICC = .995$) were found for each assessment across formats. Overall, this research provides preliminary evidence for the feasibility and reliability of conducting these assessments via telehealth. Further research should explore telehealth-based assessment with people diagnosed with mild cognitive impairment and dementia.

Key words: Telehealth, Dementia, Assessment, Mild Cognitive Impairment, social cognition, social neuroscience, cognitive assessment, ADL