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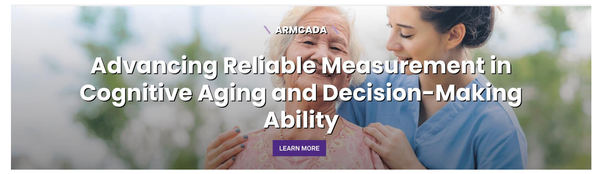

The Relation Between Functional Outcomes And Subjective Cognitive Decline In Older Adults Within ARMCADA: A Pilot Study

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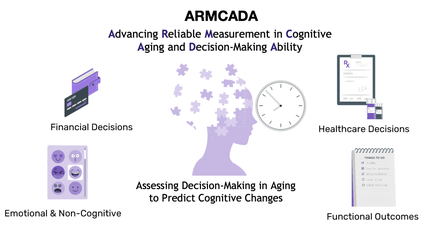
THE SELECTED FUNCTIONAL OUTCOME MEASURES ARE BRIEF, FEASIBLE, AND HAVE HIGH INTERNAL CONSISTENCY , HIGHLIGHTING THEIR PROMISE AS EARLY INDICATORS OF COGNITIVE DECLINE AND DEMENTIA-RELATED RISK.

INTRODUCTION

- ✓ Declines in decision-making (DM) abilities are often observed in older adults along the cognitive aging spectrum, including individuals with Alzheimer's disease and related dementias (ADRD)as well as those with subjective cognitive decline (SCD).
- ✓ Declines in DM may be related to worse functional outcomes (FO).
- ✓ The **ARMCADA (Advancing Reliable Measurement in Cognitive Aging and Decision-making Ability)** initiative aims to develop a multidomain DM battery for adults (45+) that will be sensitive to changes in DM ability, including DM skills related to FO, potentially predicting cognitive decline



- ✓ The aim of the current pilot study is to assess the feasibility and reliability of FO measures, along with other measures spanning multiple domains of DM, and to compare them with SCD.

METHODS

- ✓ A pilot study of n=177 adults aged 40+ were recruited online (55% female), who reported living in rural (15%), suburban (58%), and urban (25%) regions in the US.
- ✓ Participants completed self-report measures related to functional outcomes and subjective cognitive decline (SCD).

Table 1. FOH Measures used in Pilot

Functional Outcomes (FO) Measures	
Measure	**Construct**
WHO Disability Assessment Schedule 2.0 (WHODAS)[1]	Cognition, Mobility, Self-care, Getting along, Life activities, Participation
Is it time to stop Driving? Quiz[2]	Driving decision quality and readiness
Participation Scale (P-Scale)[3]	Perceived participation in society
Amsterdam IADL Questionnaire (Technology)[4]	Perceived ease of technology use
Additional Screeners	
Measure	**Construct**
PROMIS Depression, Anxiety, Social Isolation[5]	Depression, Anxiety, Social Isolation
Everyday Cognition Scale (Ecog-12)[6]	Subjective Cognitive Decline
Memory Complaint Scale[7]	Subjective Cognitive Decline

RESULTS

- ✓ **Feasibility:** >98% completion; **Reliability:** α≥.60

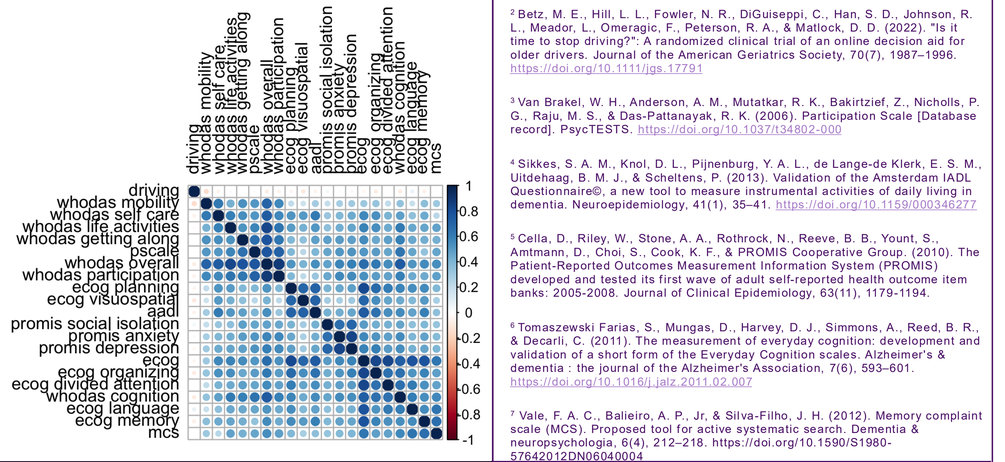
Table 2. Reliability and feasibility

Measure	☑	Items	⏱	α
WHODAS 2.0	98%	36	2.24 mins	0.96
P-Scale	99%	18	2.03 mins	0.93
Driving	99%	8	1.53 mins	0.63
A-IADL	99%	8	0.32 mins	0.93

- ✓ **Worse self-reported functioning and worse SCD, anxiety, depression, and social isolation** (WHODAS 2.0 Overall rs≥.55, ps<.001)
- ✓ **Greater perceived participation restrictions and worse SCD, anxiety, depression, and social isolation** (P-Scale rs≥.46, ps<.001).
- ✓ **Increased perceived difficulty using technology and worse SCD, anxiety, depression, and social isolation** (rs≥.35, ps<.001)
- ✓ **However, value placed on driving was not significantly related with SCD or affective states** (rs≤|.10|; ps>.05).

RESULTS (CONT.)

Figure 2. Correlation Table of FO measures



CONCLUSIONS

- ✓ The feasibility and internal consistency of the selected FO measures support their candidacy for the final ARMCADA battery.
- ✓ Findings from this pilot study will provide the foundation for future investigations exploring interactions between domains and validation in samples with a wide range of cognitive decline.
- ✓ Additional measures, including performance on an adapted version of the Test of Practical Judgment, will be included in our final battery.

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