

The Menu Task: Do Errors Predict Performance of Instrumental Activities of Daily Living?

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Introduction

Background

- Older adults may have difficulty performing complex daily activities (IADLs) which are necessary to function independently ²
- Successful IADL performance requires functional cognition which is "the observable performance of everyday activities resulting from a dynamic interaction between motor abilities, activity demands and the task environment, which is guided by cognitive abilities." 4
- Assessments used in acute settings should measure functional cognition so that client's with IADL deficits can be identified before discharge
- The Menu Task was created as a measure of functional cognition

Purpose

- To determine the reliability and validity of the Menu Task
- To determine if task errors and initiation/inhibition errors on the Menu Task predict IADL function in older adults living independently in the community

Hypothesis

 Lower scores on the Menu Task (more task errors and initiation/inhibition errors) will be associated with more deficits in IADLs

Research Design & Methods

Design

Exploratory, descriptive, cross-sectional, prospective design

Measures

• The Menu Task, PASS (medication task), Medi-Cog (recall, clock, medication task), MoCa (8 cognitive domains/executive functions), ADCS (questionnaire of everyday activities), BIMS (attention, orientation, memory), TMT A and B (processing speed, sequencing, visual-motor)

Analyses

- Mann-Whitney U test to compare median scores on ADCS and the Menu Task
- A hierarchical multiple regression to determine if task errors and initiation/inhibition errors are able to predict independence in IADLs after controlling for education, age, BIMS scores, and numbers of chronic health conditions

Results

Participants

Female (%)

White (%)

100 healthy adults over 55 living independently in the community

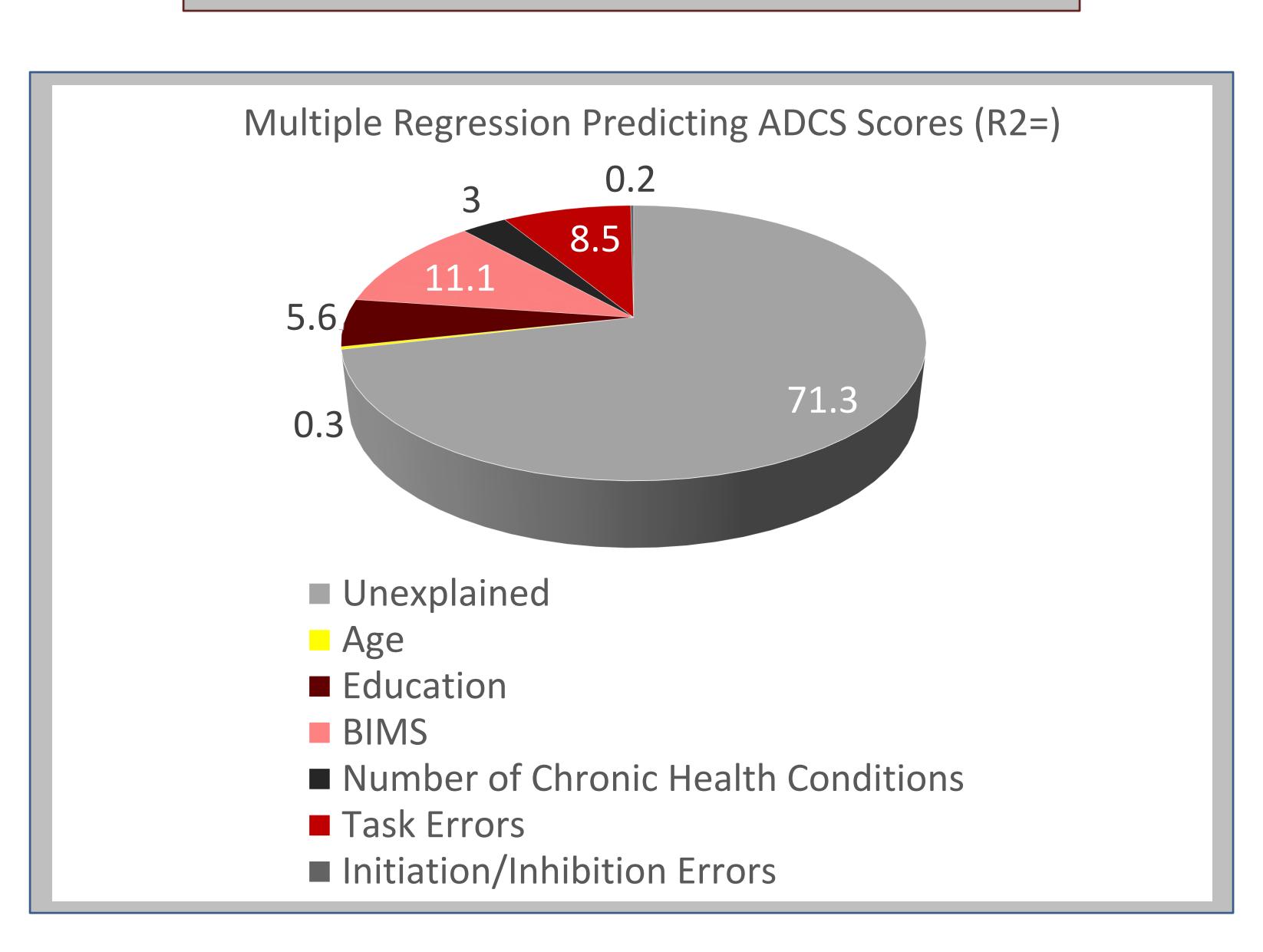
Table 1. Demographic Characteristics and Scores on Study Measures

	<u>N</u>	Mean (SD), Range
Age	100	68.59 (9.67), 55-95
Chronic Health Conditions	100	.69 (.95), 0-5
Education	100	16.01 (2.83), 10-26
Menu	100	8.42 (2.03), 4-12
ADCS	100	74.48 (3.92), 59-78
BIMS	100	14.28 (1.30), 9-15

Table 2. Stepwise Regression of Variance in ADCS Scores

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Model	<u>R</u>	R Square	R Square Change
1	.333a	.111	.111
2	.376 ^b	.141	.030
3	.377 ^c	.142	.001
4	.444 ^d	.198	.055
5	.535 ^e	.286	.088
6	.536 ^f	.287	.001



A Mann-Whitney U Test revealed a significant difference in Menu Task scores in individuals who were independent (Md = 9, n = 91) and dependent (Md = 6, n = 9) in IADLs, U = 181.5, z = -2.78, p = .005, r = .28

Conclusions

- Individuals with IADL deficits did significantly less well on the Menu Task than those without deficits in IADLs
- Task errors had a stronger relationship to IADL performance than initiation/inhibition errors, which could be due to limitations in the measure or sample
- Test administers observed clinical utility of the Menu Task but more research is needed to better understand the nonsignificant results of the initiation/inhibition errors
- Future research should utilize a more sensitive measure of IADL performance with a larger and more diverse sample

Implications for Practice

- The Menu Task has the potential to be used as a screening measure to identify older adults with functional cognitive impairments
- If further research supports the results of this study, the Menu Task could help decrease hospital recidivism rates
- The Menu Task may increase the likelihood that individuals with functional cognitive deficits receive OT services before discharge

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