

# Measuring Functional Independence, Depression and Cognition in Adults with Deafblindness: Feasibility and Score Analysis

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## INTRODUCTION

- Deafblindness is defined as the combined impairment of both vision and hearing.
- Deafblindness presents unique and complex challenges for individuals including independent functioning as well as emotional and cognitive health.
- Despite growing awareness of the needs of individuals with deafblindness, there is limited empirical research on the suitability and effectiveness of existing standardized clinical assessment tools for this population.

This study aims to evaluate the feasibility and applicability of commonly used standardized clinical measures in assessing functional, emotional, and cognitive outcomes in adults with deafblindness.

## METHODS

### Participants

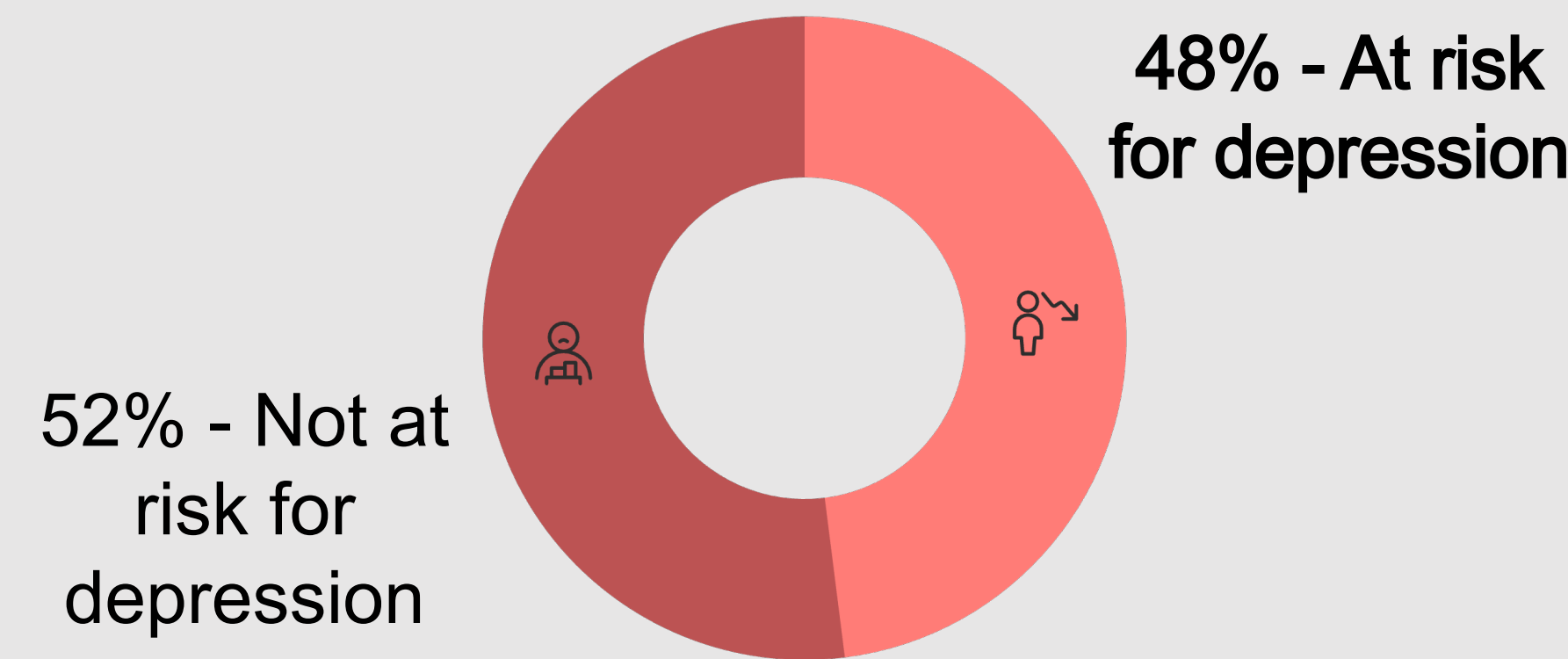
- Recruited from multiple regions across the World Health Organization with any level of combined hearing and vision loss.
- 29 participants (Mean<sub>age</sub> = 47.29, Range<sub>age</sub> = 20-75, n women = 15).
- Assessments conducted by either an occupational therapist, or a speech-language pathologist.

Tools used (identified as commonly used in the literature):

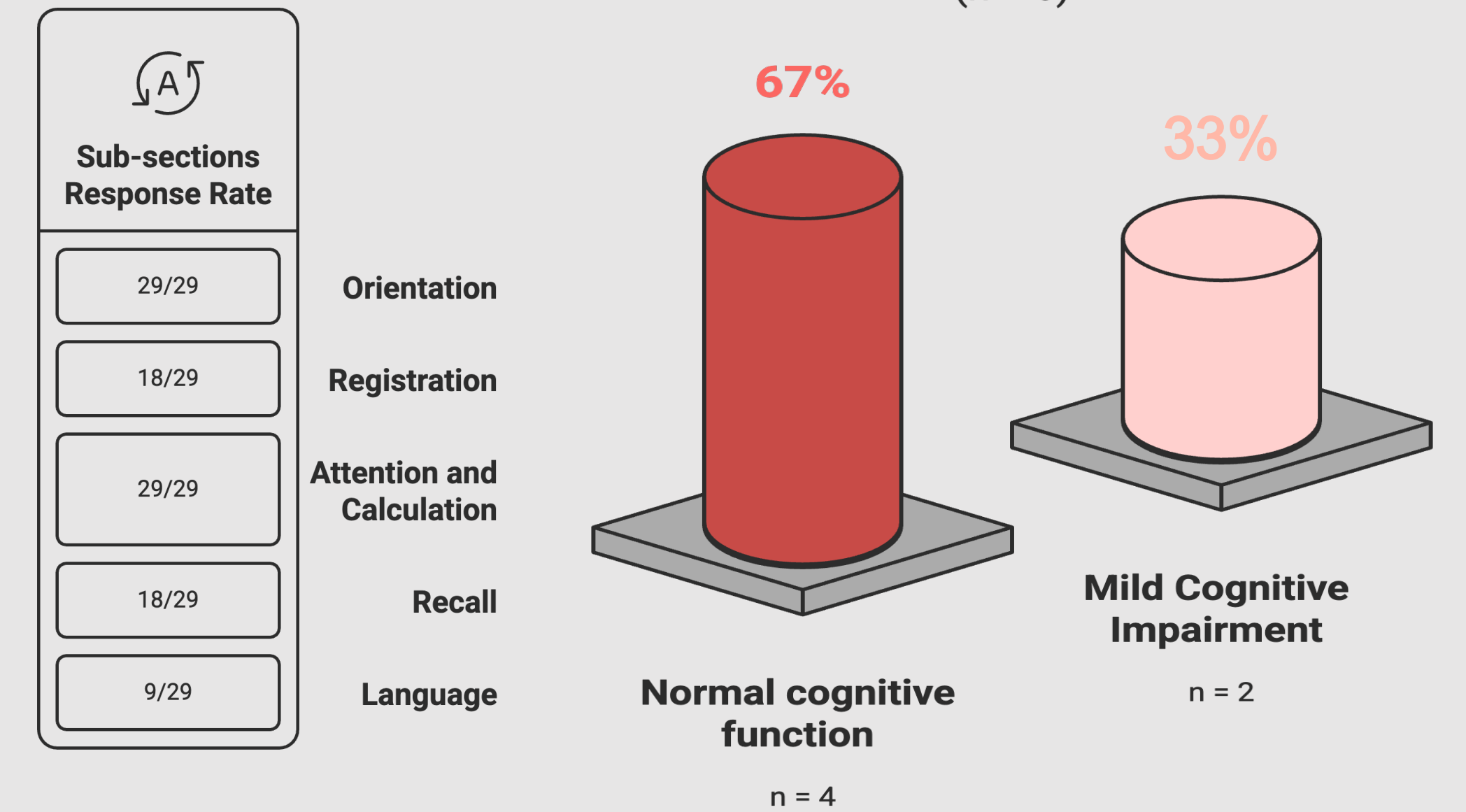
- Lawton-Brody Instrumental Activities of Daily Living Scale
- Center for Epidemiologic Studies Depression Scale
- Mini-Mental State Examination

## RESULT

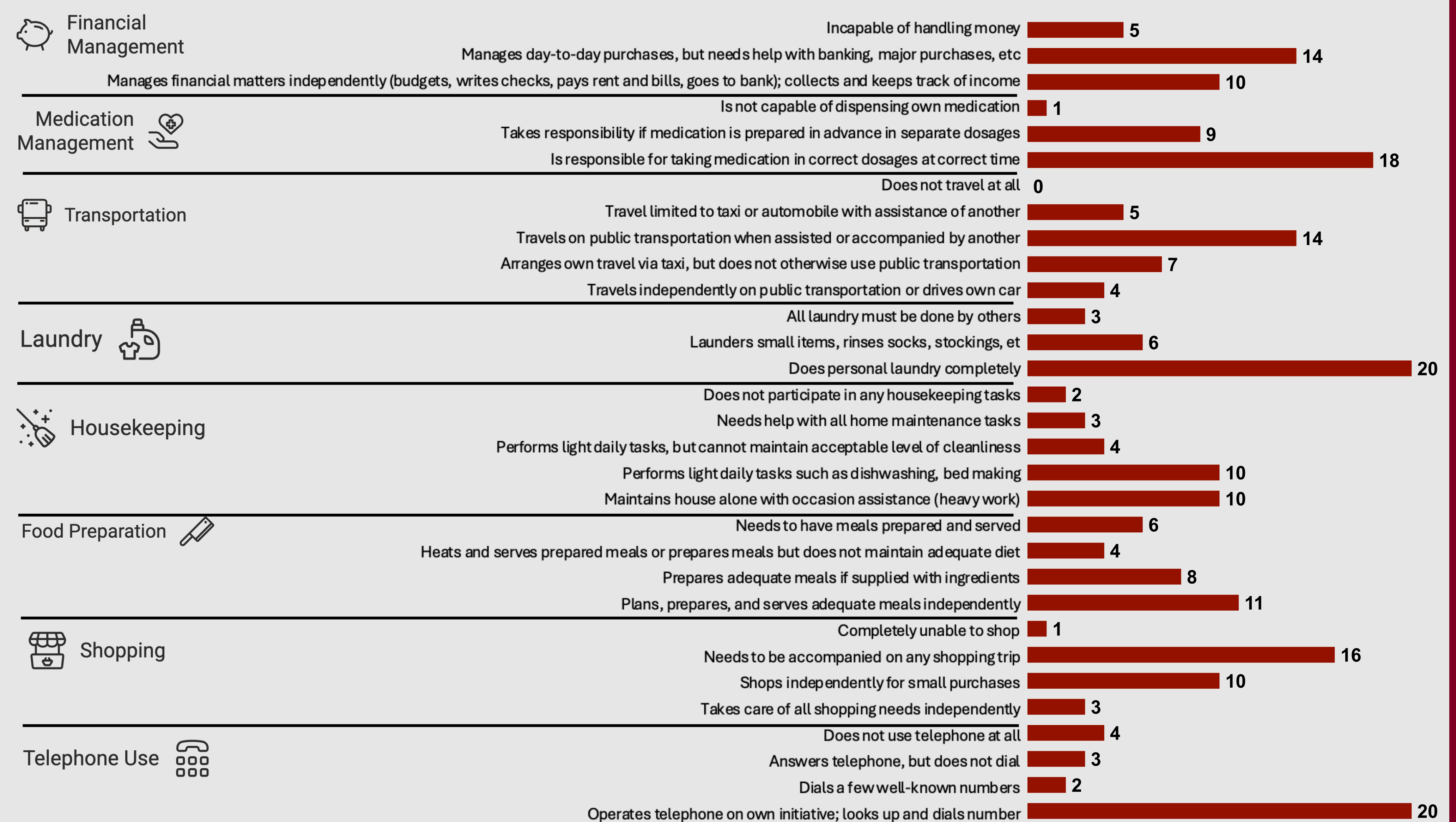
### 1. Depression - Center for Epidemiologic Studies Depression Scale



### 2. Cognitive function - Mini-Mental State Examination



### 3. Functional independence - Lawton-Brody Instrumental Activity of Daily Living Scales



## CONCLUSION & IMPLICATIONS

### Feasibility of assessments

- The Lawton-Brody IADL Scale and the Center for Epidemiologic Studies Depression Scale were generally feasible to administer and provided useful insights into functional and emotional outcomes.
- The Mini-Mental State Examination presented substantial feasibility challenges due to: communication barriers & sensory limitations.
- Incomplete data collection limited the interpretability of cognitive outcomes.

### Functional findings

- Participants showed independence in tasks like: using the telephone and managing laundry taking medication.
- Needed more support with public transportation, shopping and household chores.
- These findings point to a need for targeted supports and environmental modifications to enhance independence in more complex community-based tasks.

### Emotional health

- Nearly half (48%) of participants scored above the clinical threshold for depression risk on the CES-D.
- Indicates a high prevalence of emotional distress in this population.
- Suggests a critical need for routine mental health screening and integration of psychosocial support services into care models for adults with deafblindness.

### Future research directions

- Develop and validate inclusive cognitive assessment methods.
- Further investigate emotional and functional health in broader and more diverse deafblind populations.
- Explore multisensory assessment methods (e.g., tactile or adapted digital interfaces).

For an accessible, audio version of this poster, you can scan this QR code:



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