

# Effectiveness of Cognitive Stimulation Therapy in Improving Global Cognitive Functions, Functional Independence, and Quality of Life in Elders with Mild to Moderate Dementia at Teaching Hospital, Peradeniya, Sri Lanka



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## Cognitive Stimulation Therapy (CST):

- Evidence-based, non-pharmacological intervention
- Aligned with occupational therapy principles
  - Person centered
  - Occupation based
  - Promotes participation and social interaction

## Study Aim:

To evaluate a culturally adapted CST program among older adults with mild to moderate dementia at Teaching Hospital, Peradeniya, Sri Lanka, focusing on improvements in global cognitive functions, functional independence in activities of daily living (ADLs), and overall quality of life.



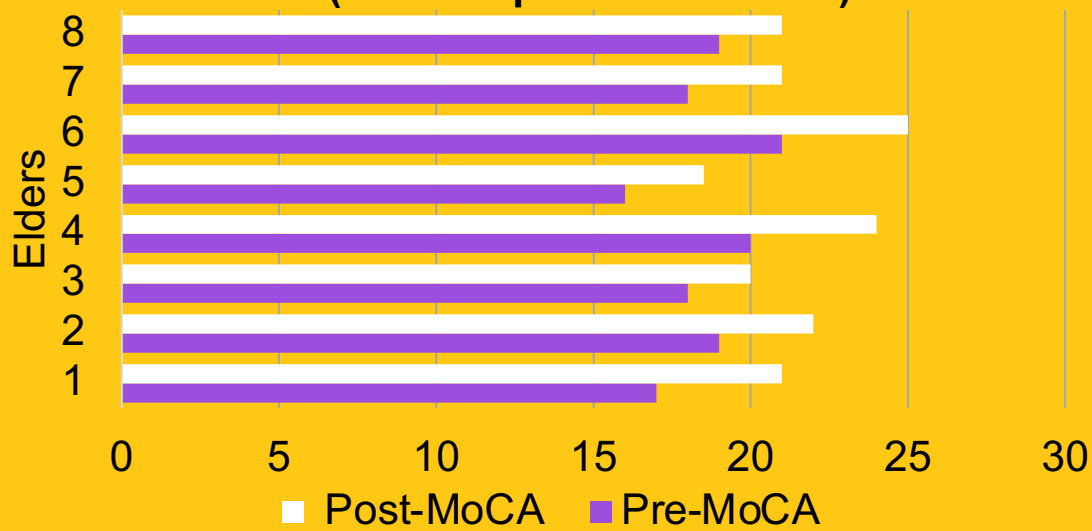
## METHODOLOGY

<b>Study Design</b>	Pre–post interventional study	
<b>Setting</b>	Teaching Hospital, Peradeniya, Sri Lanka	
<b>Participants</b>	Initially enrolled: <b>10</b> older adults	
	Completed intervention: <b>8</b> participants	
<b>Intervention</b>		
Duration: 14 days	28 Structured Group Sessions	
Language: Sinhala	Culturally Adapted	
<b>Outcome Measures</b>		
Global Cognitive functions: MoCA, ACE-III	ADL independence: Bristol ADL Scale (caregiver-reported)	Quality of life: WHOQOL-BREF
<b>Follow-up</b>	Biweekly reinforcement sessions for 6 months	
	Semi-structured caregiver interviews	

# RESULTS

## Cognitive Outcomes

MoCA Score (Pre–Post, 8 Elders) (↑)  
(Mean improvement = 3.2)



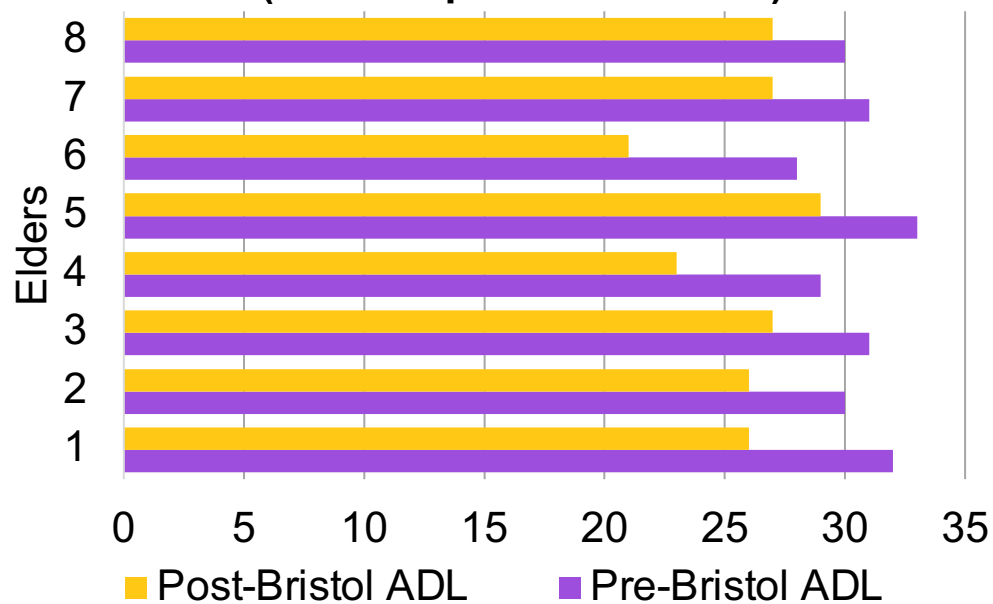
MoCA:  
↑ **3.2 points**  
( $p = 0.02$ )

ACE-III:  
↑ **5.1 points**  
( $p = 0.04$ )

Greatest gains in **attention, orientation, and delayed recall**

## Functional Outcomes

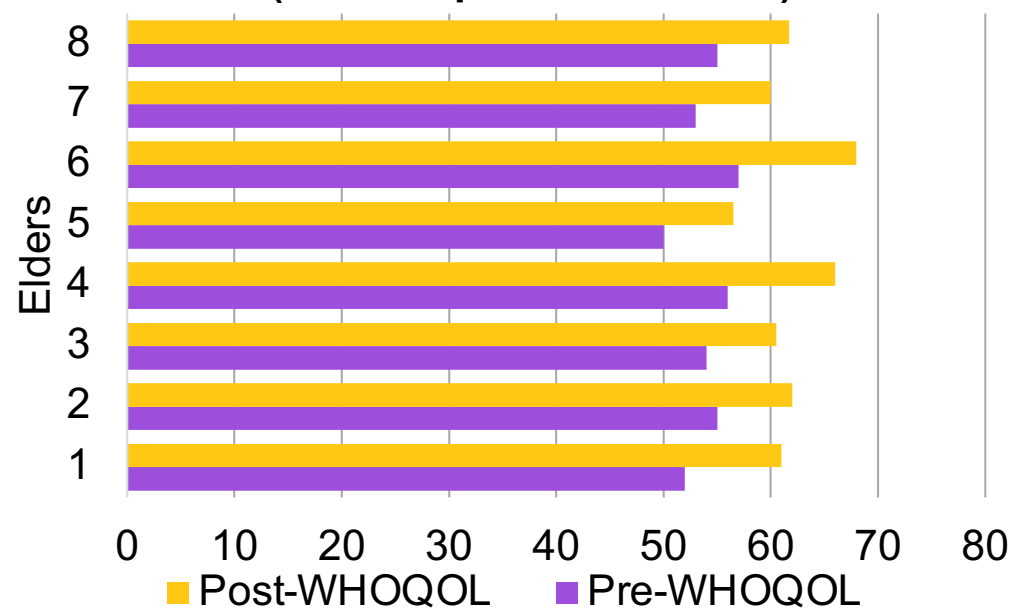
Bristol ADL Pre–Post Scores (↓)  
(Mean improvement = 4.8)



Bristol ADL: ↑ **4.8 points**  
(improved independence)

## Quality of Life

WHOQOL-BREF Pre–Post Scores (↑)  
(Mean improvement = 7.4)



WHOQOL-BREF: ↑ **7.4 points**

## Caregiver Feedback

Reduced negative emotions

Improved communication and motivation

Increased social interaction and perceived independence

## DISCUSSION

From an occupational therapy perspective, these findings align with the **Model of Human Occupation (MOHO)** and the **Person–Environment–Occupation (PEO)** model, emphasizing the interaction between performance capacity, participation, and environmental support.

The culturally adapted, group-based format likely facilitated social engagement and emotional stability, supporting CST as a practical and occupation-based approach within dementia care, particularly in resource-limited settings.

## CONCLUSION

A culturally adapted CST program can produce clinically meaningful improvements in global cognitive function, functional independence, and quality of life among elders with mild to moderate dementia.

CST represents a feasible, cost-effective, and occupation-based intervention that strengthens the role of occupational therapy in non-pharmacological dementia care, with potential for implementation in both hospital and community settings.



**STIMULATING MINDS**  
**SUPPORTING LIVES !**