



Cognitive Screening In Older Autistic Adults: Evaluating The Performance Of The Rudas

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BACKGROUND

Older Autistic adults remain largely underrepresented in dementia research, and little is known about the performance of standard cognitive screening measures in this population. The Rowland Universal Dementia Assessment Scale (RUDAS) is a brief, culturally fair cognitive screening tool that may offer advantages over traditional measures, but its diagnostic accuracy in Autistic adults has not been well established. This study evaluated the performance of the RUDAS in detecting cognitive impairment among older Autistic adults and examined whether autistic traits influence RUDAS scores.

METHODS

Seventy-eight Autistic adults aged 65–88 years (62% female) were recruited from a memory clinic. All had a confirmed autism diagnosis in clinical records. Cognitive status (healthy, MCI, AD, FTD) was determined by neurologist diagnosis. Participants completed the MoCA and AQ-10. Healthy status was defined as MoCA >26 with no reported cognitive concerns. RUDAS scores were compared across groups, with ROC analyses examining diagnostic accuracy. Linear regression was used to explore associations between AQ-10 scores and RUDAS performance.

KEY FINDINGS

- RUDAS scores decreased across diagnostic groups, indicating sensitivity to increasing cognitive impairment.
- The RUDAS showed good discrimination between healthy and impaired groups (AUC = 0.83–0.86), with sensitivity and specificity of 72–80% at cut-offs ≤24–25, although its accuracy was slightly lower than in neurotypical samples.
- Higher autistic traits were modestly associated with lower RUDAS performance ($\beta = -0.18$, $p = 0.04$).

Variable	Diagnostic Classification			
	Healthy Autistic older adults (n=24)	MCI (n=19)	AD (n=23)	FTD (n=12)
Age	69.2	71.8	74.5	73.6
Years of Education	13.5	11.4	12.3	10.2
AQ-10 Score	6.2	6.8	7.1	8.3
RUDAS Score	27.6	24.3	21.4	20.2

Table 1. Participant Characteristics by Diagnostic Group

The table presents demographic and clinical characteristics across diagnostic groups, including cognitively healthy Autistic older adults, mild cognitive impairment (MCI), Alzheimer’s disease (AD), and frontotemporal dementia (FTD).

Diagnostic Group	AUC	Sensitivity (%)	Specificity (%)	Optimal Cut-Off
Healthy vs MCI	0.84	72.5	75.3	< 25/30
Healthy vs AD	0.86	76.1	78.4	< 24/30
Healthy vs FTD	0.83	74.2	76.8	<24/30

Table 2: RUDAS Performance Summary

CONCLUSIONS

The RUDAS appears to be a promising cognitive screening tool for older Autistic adults, demonstrating acceptable diagnostic accuracy. Its reduced reliance on language, education, and social communication demands may make it particularly suitable for this group and feasible for routine clinical use.

However, variability in performance across subgroups and the modest influence of autistic traits suggest that accuracy might be slightly lower compared to neurotypical samples. This could reflect overlap between autistic traits and cognitive test demands (e.g., executive functioning, processing speed), as well as the use of norms based on neurotypical populations.

Further research is needed to validate the RUDAS in larger and more diverse Autistic samples, develop Autism-informed norms and cut-offs, and compare performance with other screening tools. Ultimately, dementia screening tools adapted or co-designed with Autistic people may enhance diagnostic accuracy and clinical relevance.