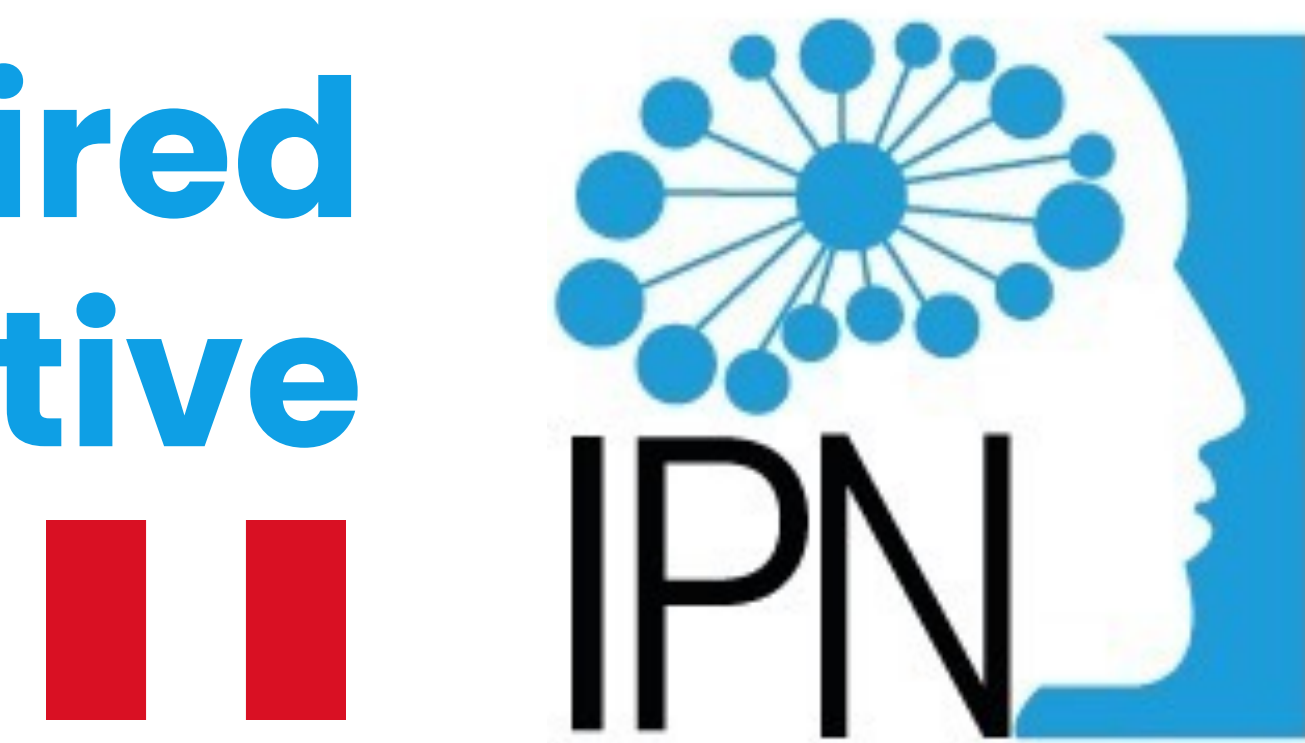


Psychometric properties of the Brief Assessment of Impaired Cognition Questionnaire (BASIC-Q) for detection of cognitive impairment in a Peruvian urban population



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BACKGROUND

- **Educational level influences certain cognitive abilities**, usually assessed through brief cognitive screening tests that do not include questions for the informant.
- **BASIC-Q requires no extensive training or test materials**, including self-report, informant report and objective questions on orientation.
- **This study aimed to evaluate the psychometric properties of the BASIC-Q in distinguishing cognitively unimpaired individuals from those with cognitive impairment in a Peruvian urban population with formal education.**

METHODS

- **n = 113 participants (age: 69.8 ± 7.4)**, without prior dementia diagnosis, and with a close relative who agreed to participate as an informant. Participants were included prospectively in clinical studies of the IPN using a convenience sampling method.
- The Uniform Data Set version 3 Neuropsychological Battery (**UDS3-NB**), the informant-completed Pfeffer Functional Activities Questionnaire (**PFAQ**) and Clinical Dementia Rating (**CDR**) were used as a reference standard for the classification of the participants' cognitive function.

RESULTS

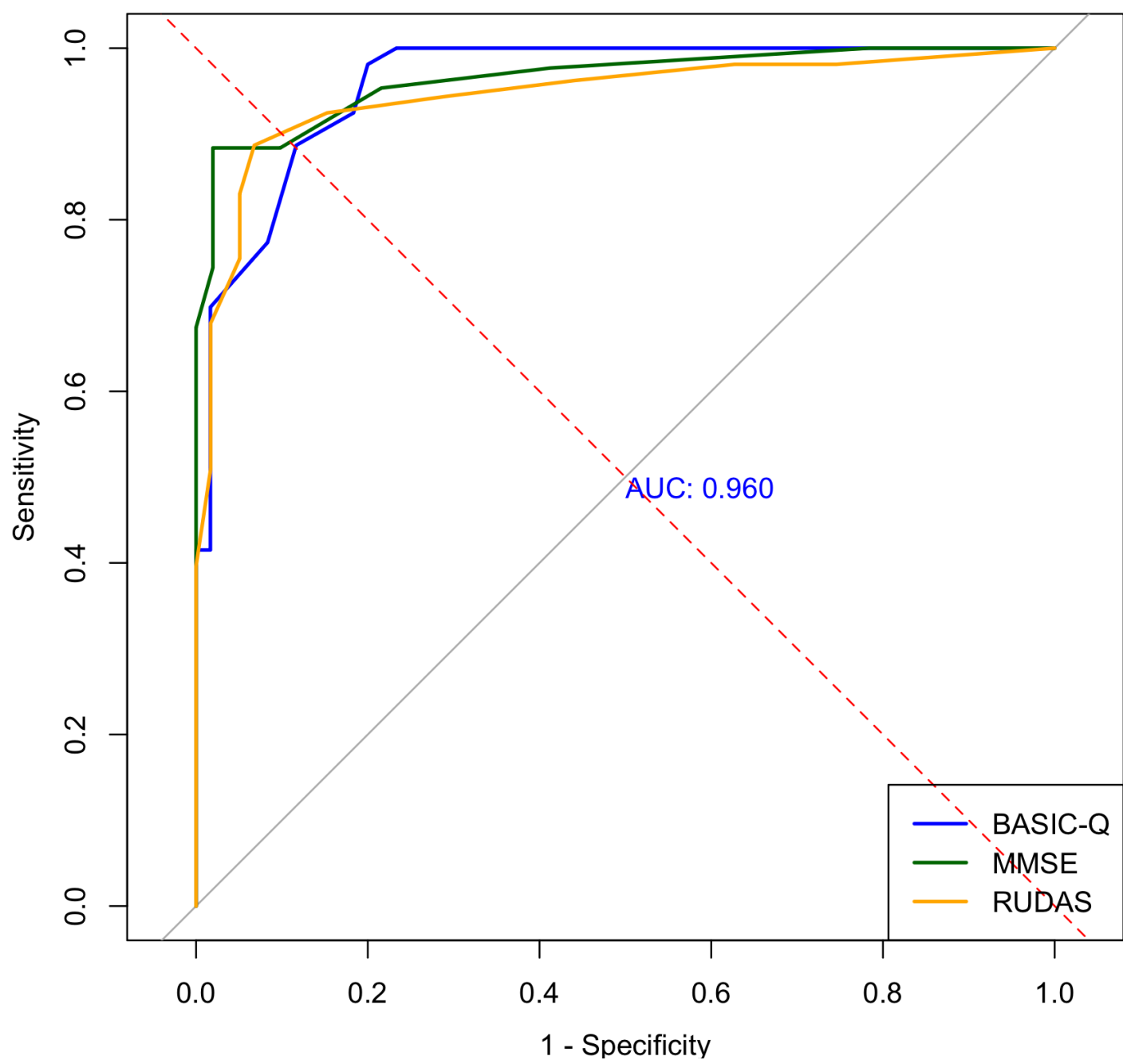
- We found an excellent internal consistency (**Cronbach's alpha: 0.94**).
- **BASIC-Q demonstrated a fair to good diagnostic accuracy to differentiate between cognitive impairment and normal cognition**, with an area under the ROC curve of 0.96 (95% CI 0.92–0.98) and a sensitivity and specificity of 0.90 (95% CI 0.77–0.95) and 0.83 (95% CI 0.78–0.94).

Table 1: Demographic and clinical characteristics

Characteristics	Normal cognition (n=60)	Cognitive impairment (n=53)	Total sample (n=113)	Chi squared / Mann-Whitney U
Gender (F/M)	19/41	18/35	76/37	p = 0.795
Age	70.43(8.89)	69.25 (5.73)	69.805(7.37)	p = 0.111
Education	14.55(2.95)	12.17 (4.09)	13.434(3.72)	p < .001
GDS-15	1.59(2.08)	5.06(3.48)	3.157(3.28)	p < .001
CDR-GS	0	1.28(0.71)	0.571(0.79)	
PFAQ	0.05(0.3)	14.11(9.26)	7.019(9.59)	p < .001
MMSE	28.47(1.71)	16.81(7.18)	24.2(12.07)	p < .001
RUDAS	27.47(2.49)	16.64(7.36)	22.35(7.63)	p < .001
BASIC-Q	18.65(2.71)	8.26(5.63)	13.78(6.76)	p < .001

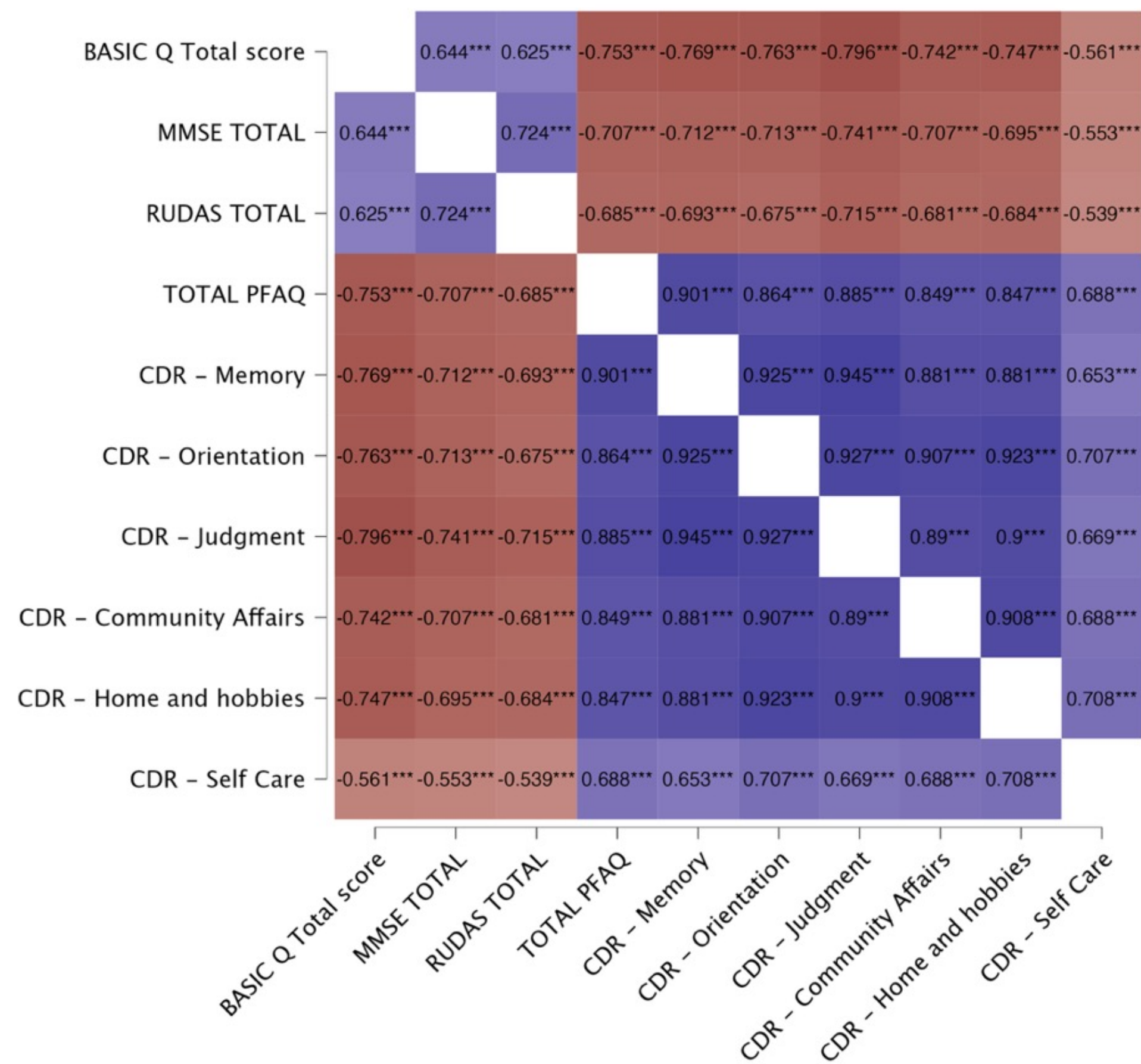
Note. all characteristics are reported as mean and standard deviation.

BASIC-Q ROC curves compared with MMSE and RUDAS



- Strong correlations were found between the BASIC-Q and MMSE, RUDAS, PFAQ and CDR.

Heatmap Kendall's tau B (all participants)



CONCLUSIONS

Given its strong psychometric properties, the BASIC-Q shows promise as a tool for the timely detection of cognitive impairment in urban Peruvian geriatric populations. Its brevity and accuracy support its use as a case-finding instrument in primary health care settings.

CONTACT INFORMATION



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