

Cognitive Screening Using Brief Cognitive Battery In Chronic Alcoholics Hospitalized In A Referral Center In Pernambuco



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BACKGROUND

Chronic alcohol abuse is strongly associated with cognitive impairment, affecting memory, attention, language, and executive functions due to neurotoxic effects on the central nervous system — especially in the prefrontal cortex and limbic system.

Most commonly impaired cognitive domains:

- ▶ Memory — episodic, working, and incidental
- ▶ Attention and information processing speed
- ▶ Language and semantic verbal fluency
- ▶ Executive functions and behavioural planning
- ▶ Visuospatial skills and constructive praxis

Cognitive assessment is essential in this population to support accurate diagnosis and guide therapeutic planning.

METHODS

Study Design

Descriptive, cross-sectional study.

Sample

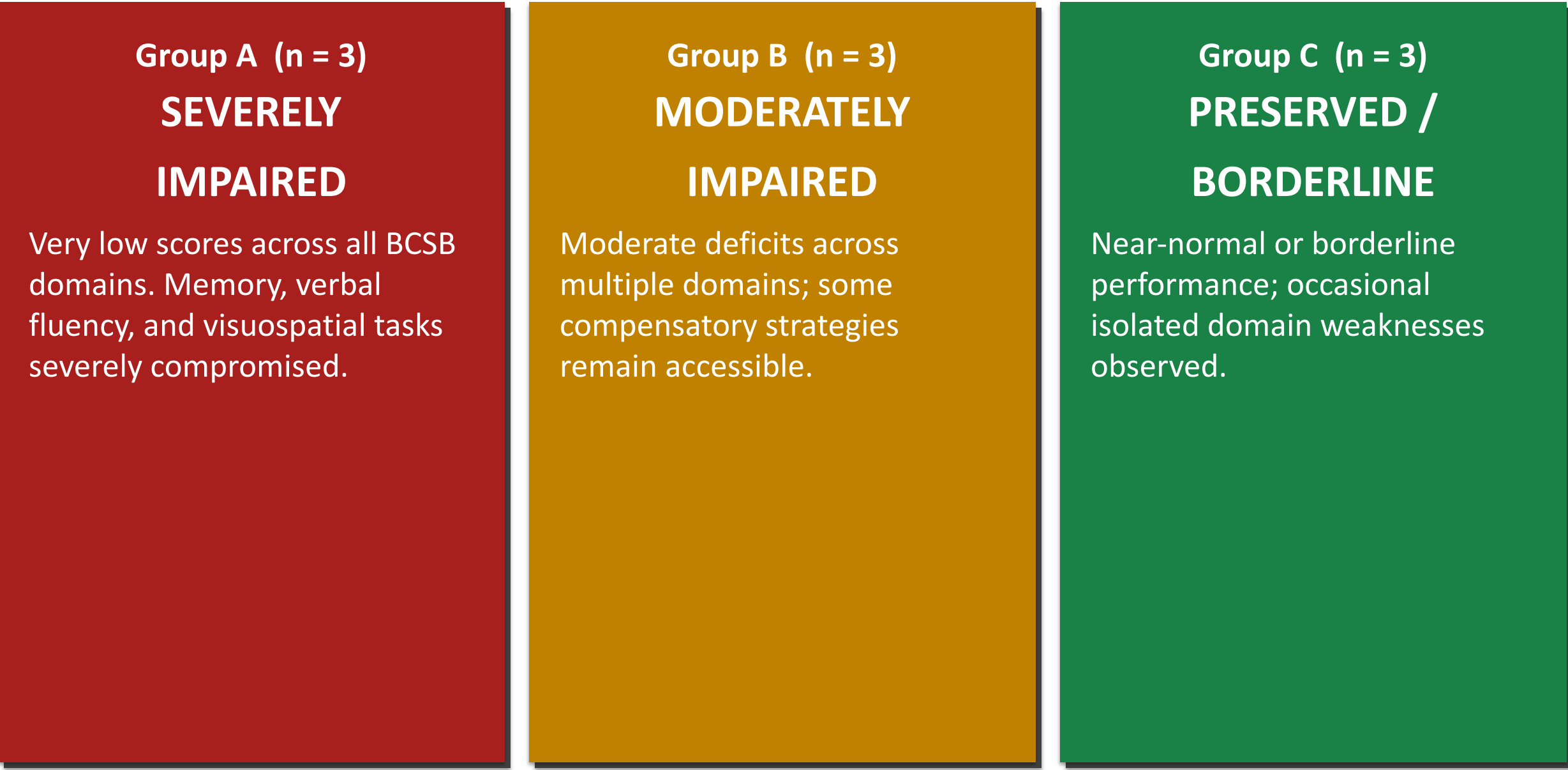
Nine (9) chronic alcoholic patients admitted to a referral hospital in Pernambuco, Brazil.

Instrument — BCSB Domains Assessed

1. Identification
2. Incidental Memory
3. Immediate Memory
4. Learning
5. Delayed Recall
6. Recognition
7. Semantic Verbal Fluency
8. Visuospatial Skills (Clock Drawing Test)
9. Total Score

RESULTS

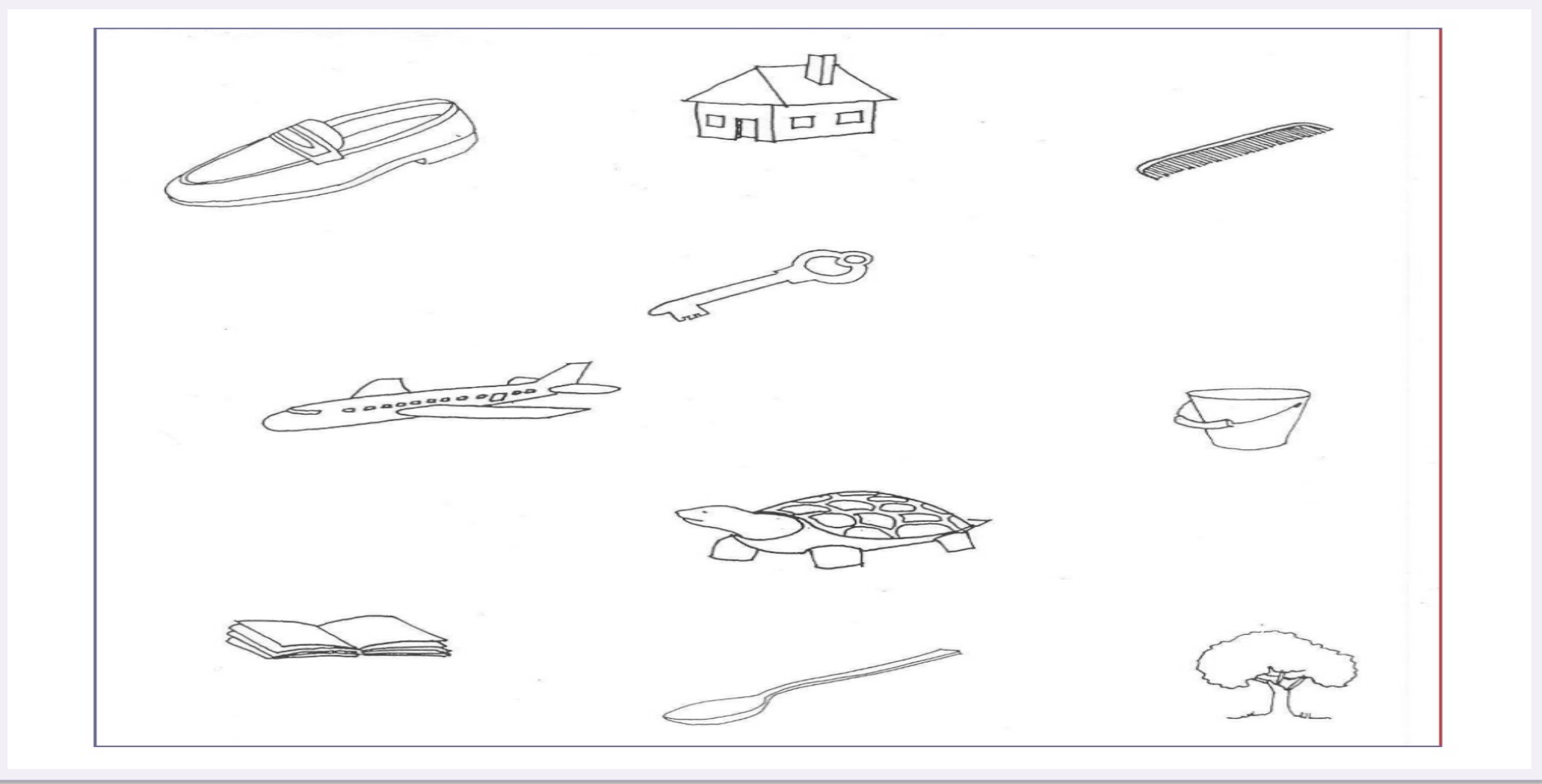
Results revealed wide variability in cognitive performance. Three distinct profiles were identified across the nine patients:



Cognitive Domain Impact

Cognitive Domain	Severity of Impact	n Affected
Memory (all types)	Severe → Moderate	9 / 9
Verbal Fluency	Severe → Moderate	9 / 9
Visuospatial Skills	Severe → Moderate	9 / 9
Delayed Recall	Moderate → Severe	7 / 9
Learning	Moderate	6 / 9
Recognition	Mild → Moderate	5 / 9

BCSB Stimulus Figure — Test Instrument



CONCLUSION

The BCSB proved to be a sensitive and practical screening tool for detecting cognitive deficits in hospitalized chronic alcoholic patients, providing clinically relevant support for rehabilitation planning.

Key conclusions:

- ▶ Cognitive impairment in chronic alcoholism is heterogeneous — ranging from mild to severe.
- ▶ Memory, verbal fluency, and visuospatial skills are consistently the most affected domains.
- ▶ Early BCSB screening identifies patients who may benefit from targeted cognitive rehabilitation.
- ▶ Cognitive assessment must be integrated into routine addiction treatment protocols.

CLINICAL IMPLICATIONS

- ▶ Systematic cognitive screening should be incorporated into standard protocols for hospitalised alcoholic patients.
- ▶ Tailored cognitive rehabilitation programmes should target the specific BCSB domains identified as impaired.
- ▶ Multidisciplinary collaboration (neurology, psychiatry, neuropsychology) is essential for managing alcohol-related cognitive impairment.
- ▶ Longitudinal studies are needed to evaluate cognitive recovery trajectories with abstinence and therapeutic intervention.

LIMITATIONS

- ▶ Small sample size (n = 9); findings may not be fully generalizable.
- ▶ Cross-sectional design limits causal inferences about cognitive trajectories.
- ▶ Duration of alcohol exposure and abstinence periods not systematically controlled.