



## Bibliographical Review of Validity Studies of Neuropsychological Tests in Brazilian's Context

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### Abstract

Neuropsychology can be understood as an interdisciplinary field that has neuroscience and psychology as bases. In this work, a review of scientific articles on studies of the validity of neuropsychological tests between the years 2011 and 2015 was carried out. Twenty-six articles were selected. The results show that 58% of the articles were reviewed by Qualis A2, in national and international journals, 50% of the sample is composed of an elderly audience, the Montreal Cognitive Assessment was the most present test and the LILACS database presented 30, 8% of articles, 20.2% aimed at correlation between tests and subtests. It can be concluded that there is a great commitment with the quality and internationalization of the works.

**Keywords:** Review; Brazil; Neuropsychological tests

### Introduction

The psychology is composed of several fields that favor a wide variety of theories. This theoretical dispersion allowed psychology to be constituted as an area of interdisciplinary knowledge, seeking in philosophy, biology, sociology, medicine, mathematics, among other theoretical references to become scientific. Therefore,

psychological evaluation stands out as a pioneer in the attempt to delimit what is the object of psychological research [1]. Neuropsychology and psychometry are examples of the progress made in psychological assessment from the exchange of disciplines [2]. Considering the difficulties in the professional and scientific setting of Brazilian psychology, especially in the field of testing and neuropsychology, this paper seeks to

look at the question of neuropsychological tests in the Brazilian context.

## Method

A bibliographic survey was carried out in the sources of indexing PsycINFO, PUBMED, Scientific Electronic Library Online (SciELO), Virtual Health Library Psychology (BVS-Psi), Electronic Periodicals in Psychology (PEPSIC), Latin American and Caribbean Literature in Health Sciences (LILACS) and Portal of CAPES Journals. The keywords "neuropsychological test", "Brazil" and "validity" were used and the period between 2011 and 2015 was delimited.

## Results

Selected 26 articles. LILACS presented 8 articles (30.8%), 6 in BVS-PSI (23.1%), 4 in SciELO (15.4%), 4 in PUBMED (15.4%), 3 in PsycINFO (7.8 %), 2 in CAPES journals (7.8%) and none in PePSIC. With distribution by year of publication in 3 in 2011, 7 in 2012, 4 in 2013, 7 in 2014 and 5 in 2015. Among the scientific journals surveyed, the *Arquivos de Neuro-Psiquiatria* appears with 26.9% of publications, followed by %) *Brazilian Journal of Psychiatry* (7.7%), *Archives of Clinical Psychiatry* (7.7%), *Dementia & Neuropsychologia* (7.7%), *Psychology & Neuroscience* (7.7%) and the others with only one article (3.8%).

As for the quality classification, Qualis was used, where fifteen articles have Qualis A2 (58%), five with B1 (19%) and two with A2 (7%) in the medical area and one for the other classifications, A1, B2, B2 medicine, B3 medicine.

In the sample variable, 9 articles targeted elderly with Alzheimer's and / or Mild Cognitive Impairment (35.6%); five had university students / healthy adults (19.2%) and four were healthy elderly (15.4%), children with medical conditions (7%) and adults with neurological lesions (7%) appear in two articles, followed by patients with Parkinson (3.8%), school-age children without medical conditions (3.8%), schizophrenic patients (3.8%) and post-surgical patients (3.8%) in one article each.

The tests / instruments surveyed, the Montreal Cognitive Assessment (MOCA) appeared in 3 articles and the Rey Auditory-Verbal Learning Test (RAVLT) is present in only two articles. It was observed that the correlation between tests and subtests (20.2%) appear as the most used procedure. Followed by the comparison studies of means by groups (18.9%), internal consistency check (16.2%) and 10.8% verified the specificity and sensitivity of the test.

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## Conclusion

Neuropsychology is a growing field in Brazil, with neuropsychological evaluation as the main representative in professional practice. This may be due to the primary role of neuropsychological assessment in research and clinical activity. In this way, neuropsychological tests have gained strength by offering a scientifically based and simple means of evaluation [3].

The relative number of studies about the validity of neuropsychological tests in the period from 2011 to 2015 is noteworthy. This number seems to reflect some problems already identified by other researchers: few studies of the psychometric properties of neuropsychological tests; a very recent growth of these studies; a deficient formation in psychometry and neuropsychology in the course of psychology [4-6].

It is also interesting to note the updating of the research in the international scenario and the focus on research quality, indicating a promising environment for the future of the field in Brazil. These aspects highlight the contributions of these researches to scientific and social development, for their recognition, quality and relevance. However, the need for studies in neuropsychological testing for participants with different ages and other groups of disorders is noticed.

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