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ORIGINAL ARTICLE

# Cross-cultural adaptation, validation and reliability of the Brazilian version of the Richmond Compulsive Buying Scale

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**Abstract**

*Objective*: To present the process of transcultural adaptation of the Richmond Compulsive Buying Scale to Brazilian Portuguese. *Methods*: For the semantic adaptation step, the scale was translated to Portuguese and then back-translated to English by two professional translators and one psychologist, without any communication between them. The scale was then applied to 20 participants from the general population for language adjustments. For the construct validation step, an exploratory factor analysis was performed, using the scree plot test, principal component analysis for factor extraction, and Varimax rotation. For convergent validity, the correlation matrix was analyzed through Pearson's coefficient. *Results*: The scale showed easy applicability, satisfactory internal consistency (Cronbach's alpha=.87), and a high correlation with other rating scales for compulsive buying disorder, indicating that it is suitable to be used in the assessment and diagnosis of compulsive buying disorder, as it presents psychometric validity. *Conclusion*: The Brazilian Portuguese version of the Richmond Compulsive Buying Scale has good validity and reliability

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## Introduction

Compulsive buying disorder, also known as oniomania, is characterized by an irresistible and repetitive urge to buy. Although there are different descriptions in the literature, the vast majority of people with this disorder experience excessive worrying and poor impulse control related to spending, chronic purchasing, and repetitive, compulsive buying of unnecessary items.[1,2]

In 1915, Emil Kraepelin (1856-1926) described oniomania as a disorder characterized by a pathological urge to buy. He emphasized that impulsiveness was a primary factor in this behavior.[3] Although some authors admit that there is a strong parallel between the symptoms of obsessive-compulsive disorder (OCD)[4,5] and compulsive buying disorder (CBD), the latter is classified as an impulse control disorder,[2] which is more commonly observed in women between the ages of 18 and 30 years. The prevalence of this disorder in the general population is approximately 2%, but it may be more prevalent in industrialized countries. For example, estimates from the US indicate prevalence rates of approximately 6%. Research on compulsive buying should be extended for the following two reasons: one, there is evidence that the prevalence of this disorder is increasing and, secondly, this is an underestimated disorder as a result of evaluation problems.[6-9]

Ridgway et al.[9] define compulsive buying as a consumer tendency to worry about the act of purchasing, which is revealed through repetitive buying and a lack of impulse control with regard to buying. According to these authors, most scales that are used to measure this disorder do not examine both the obsessive-compulsive symptoms (e.g., persistent and repetitive worrying) and the impulse control symptoms (e.g., low impulse control to purchase items) during the act of buying. Thus, Ridgway and colleagues designed a new scale to measure compulsive buying that considers both of these dimensions.

Significant harm to the individual, family or close friends[10] is necessary for a behavior to be classified as psychiatric or disruptive. For this reason, many existing diagnostic scales include damages in the measures. With regard to compulsive buying, the main loss is debt, which results in extreme financial[11,12] and emotional disorders.[13,14] An individual may also suffer losses associated with family, social, and professional relationships; however, few studies have focused on these aspects.

Regarding construct validity, compulsive buying and its consequences are different factors that should be evaluated separately.[15,16] Ridgway et al.[9] created a scale that emphasizes the identification of behavioral tendencies that underlie the disorder. Moreover, the authors argue that public concern for compulsive buying is not confined to patients with psychiatric disorders; there is a relatively widespread belief that individuals who are not diagnosed with this disorder may be compulsive buyers.

Ridgway et al.[9] reasoned that the focus on measuring the financial consequences of compulsive buying limits the ability of many of the existing scales to properly identify compulsive buyers. The main contributions of the Richmond Scale to compulsive buying were to include the OCD dimensions and the lack of impulse control in the construct. Thus, the conceptualization of this disorder extended the diagnosis of an inappropriate behavior related to the acquisition of goods to people who did not have a history or a previous diagnosis of compulsive disorder.

Although several scales assess compulsive buying, many of them have deficiencies in measuring and diagnosing the disorder[9]. The Yale-Brown Obsessive-Compulsive Scale-Shopping Version (YBOCS-SV),[17] for example, focuses exclusively on the dimension of OCD whereas the Compulsive Buying Scale (CBS)[11,18] only includes items related to impulse control. The Richmond Compulsive Buying Scale (RCBS) overcomes these limitations by assessing these two components simultaneously.

The original version of the RCBS was developed in the following manner: Ridgway et al.[9] created a list of 121 potential items for the construction of the scale after reviewing more than 300 scientific articles on compulsive buying. These potential items were examined by judges, who eliminated redundancies and ambiguities among the potential items and evaluated the consequences of compulsive buying. Subsequently, the list was reduced to 15 items, which were then administered to a sample of 352 undergraduate students, with a mean age of 21 years and 54% women. An exploratory factor analysis (EFA) was conducted. In accordance with the research hypotheses, the analysis indicated that two main factors were responsible for 69% of the total variance of the scale. Six of the 15 items did not appear on the factors identified and were excluded from the scale. Following a confirmatory factor analysis (CFA), three items were removed for failure to load on the two factors found. The analysis confirmed that the two dimensions were correlated (r = .77). Thus, the six remaining items showed satisfactory reliability. Cronbach's alphas for the subscales regarding buying concern and impulsive buying were .77 and .78, respectively.

The scale was also distributed to 555 participants to determine convergent validity. The six items of the scale were measured using a 7-point Likert scale. The authors of the study also distributed the CBS, as well as scales for measuring financial consequences, materialism index, stress, depression, and anxiety disorders.

Discriminant validity verified the relationship between the tendency to compulsively buy and OCD; both have a compulsive component, and thus, they may be positively correlated. The scale was also distributed to individuals who either did or did not have a diagnosis of being compulsive buyers. A cutoff of 24 points was set such that values above 24 points were considered to be indicators of the presence of CBD.

All of these tests indicated that the RCBS is a reliable and sensitive measure that can be applied to the general population, including individuals who have not been diagnosed as compulsive buyers. Being a short, easy to complete scale (it can be used via internet), it is also of simple interpretation.

Despite its importance, only a few Brazilian studies focus on CBD.[19,20] Moreover, no scales have been validated in Brazil to measure this disorder. This study was conducted to reduce this knowledge gap, by means of the adaptation and validation of the RCBS[7] to a Brazilian version

## Methods

### Participants

This study included 254 adult participants, who were older than 18 years and who were able to understand and sign an informed consent. The inclusion criterion was the diagnosis