

Publication of Brazilian studies to validate measurements in psychiatry

Over the past years we have seen a marked increase in the number and quality of Brazilian scientific productions in psychiatry. *Revista de Psiquiatria do Rio Grande do Sul*, which is an active participant of this process, has been making its contribution. It is important to stress its permanent practice of publishing original researches dealing with validation into Portuguese of instruments and scales developed or adapted to Brazilian samples. Such undertaking does not occur by chance. It is based on the belief by its editors and editorial board members that a major part of the knowledge currently produced in psychiatry is strongly associated with the possibility of quantifying abstract events and that this quantification will be more useful if we can use measurements properly validated to be used in Brazilian samples.

We know that the notion of measurement is crucial for science; its traditional definition by Stevens (1951, apud Carmines & Zeller 1979)¹ is: “the assignment of numbers to objects or events according to any rule.”

In psychiatry, the problem is that the phenomena to be measured are neither objects nor events in the literal sense. Psychiatrists are interested in abstract phenomena. Therefore, we use the measurement concept proposed by Carmines & Zeller: “the process of linking abstract concepts to empirical indicators.”¹

Research in psychiatry demands instruments applied to human sciences, a little different from the rest of clinical epidemiology practice in general. Empirical indicators, in most cases, are inserted in items that compose diagnostic instruments and scales for screening or symptom quantification. Measurements in psychiatry thus play two major roles: help identify cases and diagnoses and measure symptom variation. Psychiatric epidemiology is considerably delayed in

relation to other areas of Medicine; among other reasons, it is a consequence of the difficulty in developing such empirical indicators or proper measurement instruments.

In spite of this, we have witnessed a great progress in the development of a methodology appropriate to research in psychiatry. One of the major advances was the use of symptom assessment scales and diagnostic instruments that have introduced some type of measurement where previously it was only possible to have a qualitative description. Although these measurement instruments and scales present limitations, they have allowed, along with the establishment of more universal diagnostic criteria within a categorical view of mental disorders, the use of a common language between clinicians and researchers. This common language has promoted a growth in psychiatric research worldwide. The great effort made by the international scientific community to develop diagnostic instruments and screening scales and measurement of symptom severity with acceptable accuracy has made those advances possible. Structured interviews developed in the late 1970's and 1980's to identify cases based on phenomenological diagnostic criteria, have allowed the feasibility of large-scale epidemiological population studies. Clinician-rated, self-assessment or self-reporting scales that aim to promote reliable quantitative information on clinical conditions are also extremely important for scientific advances, especially in therapeutic effectiveness.²

Taking traditional psychometry as a reference, the critical issue of psychometric measurement is to demonstrate its representation conformity, i.e., demonstrate that categorization of the latent attribute (items) actually corresponds to this attribute (construct). Such demonstration is performed by studying the minimum parameters that instruments and scales must present to be legitimate and useful measurements for clinicians and researchers. Psychometric parameters of a measurement instrument essentially refer to the instrument reliability and validity.^{3,4}

According to Nunnally (1970) cited by Streiner & Norman, what we validate is not a measurement instrument globally, but one or several uses that can be made of a given instrument.⁵

Instruments and scales developed in other countries should be translated and adapted to the new cultural context in which one intends to use it. The adapted version should equally be evaluated

in terms of its psychometric properties, preferentially in population and clinical samples from the target-population to which the measurement instrument is to be applied.

Validation of measurement instruments for different cultures follows a long and hard-working process of cross-cultural adaptation, which is essential for research in psychiatric epidemiology.⁶ As mentioned earlier, measurements in psychiatry today are indispensable for the field of psychiatry. However, their proper validation for different cultures is not sufficient yet, which may jeopardize the quality of research data.

Studies that use instruments and scales developed in other countries not always report how they have been translated and adapted and whether they have been validated for the new culture to which they are being applied. We should, therefore, be cautious when using measurement instruments developed for other cultures before using them in our country. Their use demands comprehensive translation and adaptation processes, with the aim of reaching a cultural equivalence that is not achieved only by translation and back-translation techniques.^{6,7}

In the adaptation and validation process of measurement instruments for a new language, researchers will be contributing to the expansion of the instrument or scale applicability for different cultures, increasing external validity and strengthening their psychometric properties.

The validation process of instruments and scales for different cultures demands considerable financial and technical resources. Nevertheless, it is crucial for a proper use of measurement instruments in psychiatry. More reliable research data can thus be obtained, compatible with those produced by different centers in different countries and cultures, which allows us to establish truly relevant comparisons.

Disclosure of validation studies of measurement instruments into Portuguese in Brazilian samples is equally relevant. This is the appropriate form of making knowledge about such measurement instruments available and thus increase the quality of Brazilian research in psychiatry. In this context, *Revista de Psiquiatria do Rio Grande do Sul* has been consistently contributing and playing its role for the Brazilian and international scientific community.

REFERENCES

1. Carmines EG, Zeller RA. Reliability and validity assessment. In: Sullivan JL, editor. Series: Quantitative applications in the Social Sciences. Beverly Hills (CA): Sage University Press; 1979. p. 1-57.
2. Picon P. Epidemiologia e Psiquiatria. Cataldo Neto A, Gauer GJC, Furtado NR, orgs. Psiquiatria para estudantes de Medicina. Porto Alegre: EDIPUCRS; 2003. p. 83-90.
3. Pasquali L, org. Teoria e métodos de medida em ciências do comportamento. Brasília: INEP; 1996.
4. Fachel JMG, Camey S. Avaliação psicométrica: a qualidade das medidas e o entendimento dos dados. In: Cunha JA, org. Psicodiagnóstico. 5ª ed. Porto Alegre: Artmed; 2000. p. 158-70.
5. Streiner DL, Norman GR. Health measurement scales: a practical guide to their development and use. 3rd ed. Oxford: Oxford University Press; 2003.
6. Flaherty JA, Gaviria FM, Pathak D, Mitchell T, Wintrob R, Richman JA, et al. Developing instruments for cross-cultural psychiatric research. J Nerv Ment Dis. 1988;176:257-63.
7. Gorenstein C, Andrade LHSG, Zuardi AW, eds. Escalas de avaliação clínica em psiquiatria e psicofarmacologia. São Paulo: Lemos Editorial; 2000.

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