BRIEF REPORT

# The cross-cultural adaptation to Portuguese of the *Trauma History Questionnaire* to identify traumatic experiences

A adaptação transcultural para o português do instrumento *Trauma History Questionnaire* para identificar experiências traumáticas

Adriana Fiszman,<sup>1,2</sup> Mariana Cabizuca,<sup>2</sup> Claudia Lanfredi,<sup>2</sup> Ivan Figueira<sup>2,3</sup>

Versão original aceita em português

#### **Abstract**

**Background:** Despite the high prevalence of exposure to traumatic events in Brazil, there are few studies on trauma and post-traumatic stress disorder. This paper presents the cross-cultural adaptation to Portuguese of the Trauma History Questionnaire. **Methods:** Two translations and their respective back-translations were made, as well as the evaluation of the semantic equivalence, the preparation of the synthesis version, the pre-testing in the target population and the definition of the final version. **Discussion:** Similar levels of referential meaning between the two back-translations and the original instrument were observed. Priority was given to the first translation in the decision process for the elaboration of the synthesis version. The pre-testing of this version in the target population confirmed the goal to achieve the semantic and the operational equivalence criteria. This work offers the first adaptation of a specific instrument to detect traumatic experiences in the Brazilian context.

Keywords: Stress disorder, post-traumatic; Questionnaires; Translating; Semantics

# Resumo

Introdução: Apesar da prevalência elevada de exposição a eventos traumáticos no Brasil, há poucos estudos sobre trauma e transtorno de estresse pós-traumático. Este artigo apresenta a adaptação transcultural para o português do Trauma History Questionnaire. Métodos: Foram feitas duas traduções e suas respectivas retraduções, avaliação da equivalência semântica, elaboração da versão síntese, pré-teste na população-alvo e realização da versão final. Discussão: Observaram-se níveis semelhantes de significado referencial das duas retraduções em relação ao instrumento original. Deu-se primazia à primeira tradução no processo de decisão para a elaboração da versão síntese. O pré-teste na população-alvo confirmou o objetivo de atingir os critérios de equivalência semântica e equivalência operacional. Este trabalho torna disponível a primeira adaptação para o contexto brasileiro de um instrumento específico para a detecção de experiências traumáticas.

Descritores: Transtorno de estresse pós-traumático, Questionários; Tradução (processo); Semântica

Department of Psychiatry and Mental Health of the Federal University of Rio de Janeiro - UFRJ

- <sup>1</sup> Ph.D. undergraduate at the Institute of Psychiatry of the Federal University of Rio de Janeiro UFRJ.
- <sup>2</sup> Research group on stress-related disorders of the Institute of Psychiatry of the Institute of Psychiatry of the UFRJ
- <sup>3</sup> Medical School of the UFRJ

# Correspondence

Adriana Fiszman Avenida das Américas, 3333, sala 1018, Barra da Tijuca 22601-003 Rio de Janeiro, RJ, Brazil Phone/fax: (21) 3325-3585 Celular: (21) 87274890

Celular: (21) 87274890 E-mail: afiszman@rio.com.br

Financing and conflict of interests: non-existent Submitted: 31 November 2003 Accepted: 17 February 2004

## Introduction

The increasing attention for the high prevalence and morbidity of disorders related to emotional trauma<sup>1</sup> has spurred the development of investigation lines in this field. In Brazil, there are few theoretical and empirical studies about traumatic events and post-traumatic stress disorder, despite the high rates of exposure to car accidents and homicides.<sup>2</sup>

The study of traumatic events is important, as they are part of the diagnosis of post-traumatic stress disorder; without the occurrence of a traumatic event, according to the definition, there is no post-traumatic stress disorder. Besides, several psychiatric diagnosis have been associated with the history of trauma.<sup>3</sup> The authors have not found in the Brazilian literature specific instruments to gauge traumatic experiences, be they developed in Portuguese or adapted from other languages.

This article presents the stages for the translation and adaptation into Portuguese of the instrument *Trauma History Questionnaire* (THQ).<sup>4</sup> The THQ is a 24-item self-reported questionnaire which comprises the exposure to traumatic events included in the criterion A1 of post-traumatic stress disorder and acute stress disorder of the DSM-IV.<sup>5</sup>

The psychometric data of the THQ include high test-retest reliability within the period of 2 and 3 months and correlation between items varying from 0.47 to 1.00, with mean of 0.70.6 The questionnaire was employed to gauge the prevalence of trauma and post-traumatic stress disorder in different types of samples: children of Holocaust survivors, cancer patients, chemical dependence, gypnecological disorders, psychogenic non-epileptic crises and severe mental disorders. It is intended to describe the stages of the process of transcultural adaptation between the original THQ instrument and a Portuguese version proposed to be used in Brazil.

## Methods

The process of transcultural adaptation, based on the script developed by Herdman et al,<sup>13</sup> occurred in six stages: translation, back-translation, assessment of the semantic equivalence, elaboration of the synthesis version, pre-testing in the target population and elaboration of the final version.

Stage 1 consisted of two translations of the original instrument into Portuguese, independently performed by a psychiatrist and a college professor, both mastering the English language. In stage 2, the two translations (V1 and V2) were back-translated into English (R1 and R2, respectively), also independently, by two bilingual translators, who have English as their native language.

In stage 3, the authors assessed the semantic equivalence, which consists of the transference of the significance between the two languages. Firstly, it was assessed the equivalence between the original instrument and each of the backtranslations (R1 and R2), considering the perspective of the transferential meaning, which is related to the degree of literal correspondence between the words. Next, the authors compared the general meaning of the original instrument with each Portuguese version (V1 and V2). The general significance is related to the correspondence between the words in more subtle than literal aspects, taking into account the impact that they have in the cultural context to which the instrument is being adapted. A

In stage 4, it was elaborated a synthesis version, based on discussions about the concordances and divergences arisen during the analyses performed in stage 3. Some items were incorporated from one of the two versions, integrally or

modified, whereas other items resulted in the combination of the two versions. In some items, the content of this combination was modified to better meet criteria of semantic equivalence.

Stage 5 involved a pre-test of the synthesis version in a sample of the target-population which the questionnaire aims cover, in order to detect possible incongruences of significances between this version and the original instrument. The synthesis version was applied in 20 outpatients at the Federal University of Rio de Janeiro - UFRJ, with diagnosis of anxiety disorder and/or depressive disorder (DSM-IV).<sup>5</sup> Ten women and ten men (aged 21 to 50 years), whose schooling levels ranged between some elementary school to high school, were assessed. From the results of this stage, the team debated, in stage 6, the need of performing modifications to elaborate the final version.

#### Results

Table 1 exemplifies the results of stages 1, 2 and 3 for the two first questions of the instrument. The authors have assessed the referential significance (stage 3) between the pairs of items of the original instruments and of the back-translations with scores varying from 0% to 100% (A1). The assessment of the general significance (stage 3) was performed comparing the pairs of items of the original instrument and of these translations, using a 4-level qualification: unaltered, slightly altered, much altered or totally altered (A2).

The items of the two back-translations (R1 and R2) obtained very similar percentages of referential significance regarding the items of the original instrument. As to the general significance, it remained unaltered regarding the original instrument in all items (100%) of the first translation (V1), although in only 15 items (60%) of the second one (V2).

In stage 4, the superior behavior of V1 compared to V2 caused the choice of 16 items of V1 and only three items of V2, and in six situations we decided to combine the content of both translations. The back-translation of the synthesis version into English was sent to the author of the instrument, who gave her complete approval.

Some modifications were necessary to assure the connotative and social correspondence of the final version with the original instrument. For example, in the question of natural disasters, the word 'tornado' was withdrawn, as there is no such phenomenon in our society, and it was included 'earth slide', a very usual occurrence. In other questions, it was chosen to eliminate literal translations which, although correct, have little circulation in the target population. Therefore, the expression 'risco de morte' although being the correct translation for danger of death, was replaced by 'risco de vida', risk of life, which was consecrated by its ordinary use.

In stage 5 the pre-test revealed a full understanding of the synthesis version by the target population, what confirmed the objective of achieving the criteria of semantic equivalence. The format of the final version (stage 6), its way of administration and its instructions were similar to those of the original instrument, what have also assured the accomplishment of the criteria of operational equivalence.

## Discussion

This study provides the first adaptation into the Brazilian context of a specific instrument for the detection of traumatic experiences. Up to now, there is no consensus in the literature regarding the best strategy to perform transcultural adaptations. The process chosen was based on the script proposed by Herdman et al, <sup>13</sup> as this is detailed and comprehensive, besides

Table 1— Assessment of the semantic equivalence between the two items of the original instrument Trauma History Questionnaire in English and the pairs of translations (V1 and V2) and back-translations (R1 and R2)

Has anyone ever tried to take 100 something directly from you using force or the threat of force, such as an armed assault or muggling?
2. Has anyone ever tried to assault you or have they succeeded in assaulting you (i.e. robbed you of personal objects)?
,

A1 = Assessment of percentage of concordance of referential meaning A2 = Assessment of the general meaning according to the categories: UN = unaltered; SA = slightly altered; VA = very altered; CA = completely altered. Assessment of percentage of concordance of referential meaning

including a stage of interlocution with the members of the population to be covered by the instrument. Besides, this method has been already successfully applied in Brazil by researchers of the family violence field. 14-15

The six stages of the transcultural adaptation of the instrument Trauma History Questionnaire (THQ) achieved the objective of meeting criteria of semantic and operational criteria. However, this study has not performed the assessment of measurement equivalence. This stage consists of an important task in order to achieve the transcultural equivalence between the original instrument and the version herein proposed. 13 Therefore, further studies should perform this task comparing the psychometric properties of the Portuguese version of the THQ to those of the original instrument.

The authors provide readers with the integral version of table 1, which displays the results of stages 1, 2 and 3, including all items of the original instrument, of the translations (V1 and V2) and of their respective backtranslations (R1 and R2). The final version of the transcultural adaptation of the THQ into Portuguese, which was proposed in this study, is also available.

## Acknowledgements

The author thank to Dr. Liliane Vilete for the scientific assistance and to professors Marlene Fiszman, Kelly Hayes and Beijamin Lessing for the translation.

#### References

- Ursano RJ. Post-traumatic stress disorder. N Engl J Med. 2002;346(2):130-2.
- Figueira I, Mendlowicz M. Diagnóstico do transtorno de estresse pós-traumático. Rev Bras Psiguiatr. 2003;25(Supl 1):12-6.
- Breslau N. Epidemiologic studies of trauma, posttraumatic stress disorder, and other psychiatric disorders. Can J Psychiatry. 2002:47(10):923-9. Review.
- Green BL. Trauma history questionnaire. In: Stamm BH, Varra EM. Measurement of stress, trauma and adaptation. Lutherville, MD: Sidran Press; 1996. p. 366-8.
- American Psychiatric Association. Diagnostic and statistical manual of mental disorders DSM-IV. 4th ed. Washington DC:
- Najavits LM, Gastfriend DR, Barber JP, Reif S, Muenz LR, Blaine J, et al. Cocaine dependence with and without PTSD among subjects in the National Institute on Drug Abuse Collaborative Cocaine Treatment Study. Am J Psychiatry. 1998;155(2):214-9.
- Yehuda R, Schmeidler J, Wainberg M, Binder-Brynes K, Duvdevani T. Vulnerability to posttraumatic stress disorder in adult offspring of Holocaust survivors. Am J Psychiatry. 1998;155(9):1163-71.
- Green BL, Rowland JH, Krupnick JL, Epstein SA, Stockton P, Stern NM, et al. Prevalence of posttraumatic stress disorder in women with breast cancer. Psychosomatics. 1998;39(2):102-11.
- Najavits LM, Weiss RD, Reif S, Gastfriend DR, Siqueland L, Barber JP, et al. The Addiction Severity Index as a screen for trauma and posttraumatic stress disorder. J Stud Alcohol. 1998;59(1):56-62.
- 10. Rosenberg HJ, Rosenberg SD, Wolford GL2nd, Manganiello PD, Brunette MF, Boynton RA. The relationship between trauma, PTSD, and medical utilization in three high risk medical populations. Int J Psychiatry Med. 2000;30(3):247-59.
- 11. Rosenberg HJ, Rosenberg SD, Williamson PD, Wolford GL 2nd. A comparative study of trauma and posttraumatic stress disorder prevalence in epilepsy patients and psychogenic nonepileptic seizure patients. Epilepsia. 2000;41(4):447-52.
- 12. Mueser KT, Salyers MP, Rosenberg SD, Ford JD, Fox L, Carty P. Psychometric evaluation of trauma and posttraumatic stress disorder assessments in persons with severe mental illness. Psychol Assess. 2001;13(1):110-7.

- 13. Herdman M, Fox-Rushby J, Badia X. A model of equivalence in the cultural adaptation of HRQoL instruments: the universalist approach. Qual Life Res. 1998;7(4):323-35.
- 14. Reichenheim ME, Moraes CL, Hasselmann MH. Equivalência semântica da versão em português do instrumento "Abuse Assessment Screen" para rastrear a violência contra a mulher grávida. Rev Saude Publica. 2000;34(6):610-6.
- 15. Moraes CL, Hasselmann MH, Reichenheim ME. Adaptação transcultural para o português do instrumento "Revised Conflict Tactics Scales (CTS2)" utilizado para identificar violência entre casais. Cad Saude Publica. 2002;18(1):163-76.