

**APPENDIX:****Checklist for reviewers/authors of studies on the translation and cross-cultural adaptation of questionnaires/assessment instruments****Instructions to reviewers/authors:**

- Stage I: Translation into Portuguese:
  - ✓ Did the authors mention the presence of at least two translators?
  - ✓ Were the bilingual translators native speakers of Brazilian Portuguese?
  - ✓ Did the translators have different professional backgrounds and profiles (i.e. one translator has knowledge of the concepts assessed by the instrument and the other is not related to the health area)?
  - ✓ Did the translators work on the translation independently?
  - ✓ Did the authors describe the translator's questions or changes and the rationale behind the translation?
- Stage II: Synthesis of translation
  - ✓ Were the translators involved in the reporting of the process?
  - ✓ Were the translated versions compared to the original questionnaire to extract a synthesis of the first Portuguese version of the questionnaire (version I)?
  - ✓ Did the authors present a report of the synthesis process containing the questions that required changes and how they were resolved?
  - ✓ Was there mention of the process of consensus between the translators?
- Stage III: Back translation
  - ✓ Was version I of the translated questionnaire translated back into the original instrument's language?
  - ✓ Were at least two translators involved?
  - ✓ Were the bilingual translators native speakers of the original instrument's language?
  - ✓ Did the authors ensure that the translators were not familiar with the original version of the questionnaire?
  - ✓ Did the authors ensure that these translators did not have a background in the area of health or information about the concepts explored by the questionnaire or instrument?
- Stage IV: Expert committee
  - ✓ Did the Committee include methodologists, health professionals, language professionals, and translators (Stage I and II translators and Stage III back translators)?
  - ✓ Were the authors of the original questionnaire contacted and did they grant approval for the cross-cultural adaptation? (Required)
  - ✓ Is there mention of the participation of the authors of the original questionnaire during this stage? (Not required)
  - ✓ Did the consolidation of a pre-final version consider all reports, translations, and back translations?
  - ✓ Is there mention of the aspects that required changes at this stage and of how they were resolved?
  - ✓ Were the Committee's decisions aimed at ensuring semantic, idiomatic, experimental, and conceptual equivalence between the versions?
- Stage V: Pre-test of pre-final version
  - ✓ Was the pre-final version tested on at least 30 subjects?
  - ✓ Were these subjects part of the target population of the assessed questionnaire or instrument?
  - ✓ Did every subject answer the questionnaire or instrument and was each one interviewed to explore their comprehension of each item and answer of the questionnaire? Guillemin et al. (1993) suggest posing the question: "What did you mean?" to assess their understanding of the item.
  - ✓ Did the authors report the percentage of uncertainties during this part of the process (pre-final version)? Uncertainties reported by 15 or 20% or more of the sample indicate the need for revision of the questionnaire (Ciconelli et al., 1999; Nusbaum et al., 2001). If the percentage is greater than

15% or if more subjects were included, the translated and adapted version of the questionnaire or instrument must be changed and a new pre-test must be conducted and reported.

- ✓ For original instruments already established in the literature and whose construct has been assessed, the authors should briefly describe the results of this assessment. Otherwise, the authors of the current version must assess the construct using the data from the translation.
- ✓ We recommend that the original instrument be submitted with the manuscript as a separate file.

<b>Checklist – Submission of studies on translations and cross-cultural adaptations and validation</b>		<b>Author</b>		<b>Reviewer</b>
<b>Items of translation and cross-cultural adaptation</b>		Mark with an X	Reported on page no.	Mark with an X
1 - Title mentions that it is a translation and cross-cultural adaptation.				
2 - Reference to original instrument was included in Methods.				
3 - Reference to original instrument was included in References.				
4 - Translated instrument was included in full at the time of submission.				
5 - Original instrument was submitted in full.				
6 - Authorization was given by the authors of the original instrument.				
7 - Guidelines by Beaton et al. (2000) were followed in the translation and adaptation stages and the authors clearly mention the use of this guideline.				
Translation - 2 translators (1 lay translator and 1 specialized in the area).				
Meeting of translation committee (synthesis of translation).				
Back translation - 2 lay translators.				
Meeting of expert committee.				
Test of pre-final version (n≥30).				
Rate of comprehension was described in the test of the pre-final version – uncertainties reported by 15 or 20% or more of the sample indicate the need for revision of the questionnaire (Nusbaum et al., 2001).				
8 - All items of the questionnaire were translated and cross-culturally adapted, including alternative answers and instructions.				
9 - A clear description was given of the cultural adaptations made during the study.				
10 - A clear description of the sample characteristics was included in the stages of the study.				
<b>Measurement properties</b>				
<b>Required</b>				
11 - Was the translated instrument's reproducibility (test-retest) assessed?				
12 - Was the sample size adequate for assessment of the reproducibility? (Terwee et al., 2007)				
13 - Was the translated instrument's internal consistency assessed?				
14 - Was the sample size adequate for assessment of the internal consistency? (Terwee et al., 2007)				
<b>Recommended</b>				
15 - Was confirmatory factor analysis of the translated instrument conducted?				
16 - Was the sample size adequate (Mokkink et al., 2010) for confirmatory factor analysis of the translated instrument?				
<b>OR</b>				
17 - If exploratory factor analysis was not conducted in the original study, was it conducted in the translation study?				

18 - Was the sample size adequate (Mokkink et al., 2010) for exploratory factor analysis of the translated instrument?			
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### Referências

- Beaton DE, Bombardier C, Guillemin F, Ferraz MB. Guidelines for the process of cross-cultural adaptation of self-report measures. *Spine* 2000;25(24):3186-3191.
- Ciconelli RM, Ferraz MB, Santos W, Meinão I, Quaresma MR. Tradução para Língua Portuguesa e validação do questionário genérico de avaliação de qualidade de vida SF-36. *Revista Brasileira de Reumatologia* 1999;39:143-150.
- Guillemin F, Bombardier C, Beaton D. Cross-cultural adaptation of health-related quality of life measures: literature review and proposed guidelines. *J Clin Epidemiol* 1993;46(12):1417-1432.
- Nusbaum L, Natour J, Ferraz MB, Goldenberg J. Translation, adaptation and validation of the Roland-Morris questionnaire. *Braz J Med Biol Res* 2001;34(2):203-210.
- Chen WH, Lenderking W, Jin Y, Wyrwich KW, Gelhorn H, Revicki DA. Is Rasch model analysis applicable in small sample size pilot studies for assessing item characteristics? An example using PROMIS pain behavior item bank data. *Qual Life Res.* 2014 Mar;23(2):485-93.
- Terwee CB, Bot SD, de Boer MR, van der Windt DA, Knol DL, Dekker J, Bouter LM, de Vet HC. Quality criteria were proposed for measurement properties of health status questionnaires. *J Clin Epidemiol.* 2007 Jan;60(1):34-42.