Recommendations for elaboration, transcultural adaptation and validation process of tests in Speech, Hearing and Language Pathology

Recomendações para elaboração, tradução, adaptação transcultural e processo de validação de testes em Fonoaudiologia

ABSTRACT

Objective: to present a guide with recommendations for translation, adaptation, elaboration and process of validation of tests in Speech and Language Pathology. Methods: the recommendations were based on international guidelines with a focus on the elaboration, translation, cross-cultural adaptation and validation process of tests. Results: the recommendations were grouped into two Charts, one of them with procedures for translation and transcultural adaptation and the other for obtaining evidence of validity, reliability and measures of accuracy of the tests. Conclusion: a guide with norms for the organization and systematization of the process of elaboration, translation, cross-cultural adaptation and validation process of tests in Speech and Language Pathology was created.

RESUMO

Objetivo: apresentar um guia com recomendações para a tradução, adaptação, elaboração e processo de validação de testes em Fonoaudiologia. Método: as recomendações apresentadas foram baseadas em diretrizes internacionais tradicionais cujo enfoque está na elaboração, tradução, adaptação transcultural e processo de validação de testes. Resultado: as recomendações foram compiladas em dois quadros, sendo um deles referente aos procedimentos para tradução e adaptação transcultural e o outro à obtenção de evidências de validade, confiabilidade e medidas de acurácia dos testes. Conclusão: foi apresentado um guia com as principais recomendações para a organização e sistematização do processo de elaboração, tradução, adaptação transcultural e processo de validação de testes em Fonoaudiologia.
INTRODUCTION

In the area of health care, an adequate evaluation process depends on the utilization of tests whose interpretations of the results are valid, reliable/precise and equitable. Validity refers to the gathering of evidence, which indicates if the test really measures what it intends to measure. Reliability/precision indicates if the test is reproducible over time (stability), if there is control of measurement errors (precision) and if the result of the test is dependent on the items that constitute it (homogeneity)\(^{(1-3)}\). Equally allows the analysis of whether the test evaluates the individuals in an impartial manner, without permitting irrelevant issues from unduly exercising influence on the outcome and generating inequalities\(^{(1-4)}\).

In Brazil, the application of these principals by Speech-language Therapy is rare or undertaken in a partial manner, with a systematization of the methodological procedure still being necessary\(^{(5)}\). The validation process is not satisfied simply with the elaboration, translation and adaptation of a test. For this to occur, the utilization of international norms, which guarantee the effective obtainment of the psychometric and clinimetric properties of the test, are necessary.

Despite there being controversies between some guidelines\(^{(6)}\), certain methodological principals cannot be neglected. The aim of this manuscript is to present a short guide with recommendations for the translation, adaptation, elaboration and validation process for Speech-language therapy tests.

METHODS

The recommendations presented here were based on the experience of the authors with the most traditional and commonly utilized international guidelines related to the elaboration, translation, transcultural adaptation and validation process for tests. In the case of translation and transcultural adaptation, the recommendations of Beaton et al.\(^{(7)}\) were followed, as well as the guidelines of the International Test Commission (ITC)\(^{(8)}\). In the case of the validation process for tests, the principals of the Standards for Education and Psychological Testing (SEPT)\(^{(9)}\), were used, a guideline proposed by three North-American organizations, which brings together the most reliable and utilized recommendations and definitions related to the psychometric aspects involved, from the elaboration to interpretation of the tests.

Given that this manuscript is a methodological note, which did not involve collection of data from human beings, it was not necessary to submit the study for appraisal by an ethics committee.

RESULTS

Recommendations for the elaboration, translation, transcultural adaptation and validation process for Speech-language therapy tests are presented in Charts 1 and 2.

---

\(^{1}\)In the collaborative evaluations, assessment strategies can be adopted in relation to the equivalencies utilizing, for example, a visual analogical scale or scales of the Likert type. The calculation of the Content Validity Index for Scales (CVI-S) and for Item (CVI-I)\(^{(5)}\) helps at this stage as a quantitative indicator of agreement between the evaluators.
The elaboration, translation, transcultural adaptation and validation process are methodological procedures necessary to guarantee that the interpretation of the test results is valid and reliable. In Brazil, these procedures have been frequently reproduced in Speech-language therapy, however not always with the indispensable scientific rigor recommended by the international guidelines.

In the case of translation and transcultural adaptation, there are around thirty guidelines, but no consensus points toward a single standard of reference. Recommendations proposed in the 1990s and updated in the 2000s are the most disseminated in the international literature. In the present study these recommendations were followed, as well as the guidelines from the International Test Commission Guidelines (ITC).

The SEPT exists since the 1950s and specifies, beyond reliability/precision and equity, five sources of evidence for validity, based on: content, response processes, internal structure, relation with other variables and consequences of the test. In the area of health care, the proposals of the Scientific Advisory Committee of the Medical Outcomes Trust (SAC) of the Committee of the Medical Outcomes Trust and of the 1990s and updated in the 2000s are the most disseminated in the international literature. In the present study these recommendations were followed, as well as the guidelines from the International Test Commission Guidelines (ITC).

The SEPT exists since the 1950s and specifies, beyond reliability/precision and equity, five sources of evidence for validity, based on: content, response processes, internal structure, relation with other variables and consequences of the test. In the area of health care, the proposals of the Scientific Advisory Committee of the Medical Outcomes Trust (SAC) and of the International Test Commission Guidelines (ITC) were followed, as well as the guidelines from the International Test Commission Guidelines (ITC).

The SEPT exists since the 1950s and specifies, beyond reliability/precision and equity, five sources of evidence for validity, based on: content, response processes, internal structure, relation with other variables and consequences of the test. In the area of health care, the proposals of the Scientific Advisory Committee of the Medical Outcomes Trust (SAC) and of the International Test Commission Guidelines (ITC) were followed, as well as the guidelines from the International Test Commission Guidelines (ITC).
the Consensus-based Standards for the Selection of Health Measurement Instruments (COSMIN)\(^ {11}\) are referenced with frequency and can also be consulted. However, it is worth noting that these two guidelines consider psychometric concepts that the SEPT already ceased to advocate since the 1999 edition, that is to say, they are proposals, which are should be analyzed with parsimony, especially due to their conceptual mark.

CONCLUSION

The main recommendations for the organization and systematization of the processes of elaboration, translation, transcultural adaptation and validation for Speech-language therapy tests are presented. We recommend a careful reading for each one of the procedures mentioned here, but we hope that these guidelines aid in the realization of future research in the area and can help speech-language therapists choose their tests in a more exacting fashion, assembling the best evidence to evaluate a determined outcome.

REFERENCES


Author contributions

LP and HVMJ contributed with the conception, writing and final revision of the article; AE and KCL contributed with the final revision of the article.