

Importance of adapting questionnaires for different languages and cultures

As evidence based practice gains momentum in hearing-related disciplines and as hearing devices become more popular in different parts of the World, developing appropriate tools to assess outcomes is paramount. Recent efforts have been seen in adapting questionnaires developed in English speaking countries to another language to be used in different cultures. These questionnaires include, but are not limited to, the International Outcomes Inventory for Hearing Aids ([International Journal of Audiology. 2002;41\[1\]:3](#)) and the Speech, Spatial and Qualities of Hearing Scale ([International Journal of Audiology. 2004;43\[2\]:85](#)).

Generally speaking, two approaches have been taken to adapt hearing-related questionnaires. The first approach focuses on maintaining the nuances of the original version and sometimes adapting the items to suit the culture, without paying attention to the appropriateness of the language and the validity of the translation. Psychometric equivalence may be assumed, rather than formally evaluated. As such, findings may be invalid when outcomes of those translated questionnaires are compared against norms obtained using the source-language questionnaire. The second approach carefully translates the items according to a published good practice guideline on translating healthcare related questionnaires ([Journal of Clinical Epidemiology. 2015; 68\[4\]:435](#)) and may adapt some items to make them relevant for the target culture. As these published guidelines do not directly address issues specific to Audiology (e.g., importance attributed to listening ability and geographical variations in listening environment and in social culture), researchers or clinicians may make decisions based on their best judgement. While the second approach is superior to the first one in ensuring functional equivalence between the translated and source-language versions, a review of relevant publications suggests a lack of full documentation of the translation/adaptation process, making comparison across studies difficult.

The International Journal of Audiology (IJA) recently published a guideline on questionnaire adaptation ([International Journal of Audiology. 2017; 56\[12\]:1](#)). Currently available guidelines were reviewed, and expert opinions were incorporated from researchers who have led projects to adapt questionnaires for use in other cultures and languages to establish this guideline for hearing-related questionnaires. Members of two international organisations - the International Collegium of Rehabilitative Audiology (ICRA) and the TINnitus Research NETwork (TINNET) – were consulted in face-to-face meetings and emails to ensure that the guidelines not only follow conventional practice, but also reflect contemporary issues that may arise in different cultures across the globe. Specific attention was paid to adapting questionnaires for speakers (e.g., immigrants) of different cultural backgrounds living in a second language environment, and those speaking different languages in different cultures (e.g., different ethnic groups in a country). We also considered differences in living environment (e.g., metropolis versus rural), implications of language and culture on listening needs (e.g., participation of family members in communication interchange) and the need to adapt the rating scales (e.g., certain rating scales may not be appropriate in some cultures). Various issues were debated among members and a best practice standard was agreed, wherever possible.

The guideline recommends six methodological steps to adapt a selected questionnaire: 1) Preparation which includes involving and obtaining permission from the source language questionnaire developer; 2) Forward translation to the target language while accounting for cultural, language and lifestyle differences; 3) Back translation to the source language to check whether the nuisances of the source-language questionnaire has been maintained; 4) Committee review of the outcomes from the previous steps to ensure that the purposes are met; 5) Field testing evaluates whether any unexpected issues may arise and to help resolve issues where prior consensus could not be reached, and 6) Reviewing and finalising the

translation. To address these six steps, a step-by-step guide has 22 items that lead the reader through all the procedures necessary to be confident that the translated questionnaire is functionally equivalent to the original, while accounting for any cultural differences. Short descriptions for each of these steps are provided. To facilitate a better understanding of how these steps should be followed and reported, published examples were used as illustrations. These examples are available as Supplementary materials on the IJA website. Readers may refer to ([International Journal of Audiology. 2017; 56\[12\]:1](#)) for the full guideline.

The guideline also highlighted the importance of involving the source language developer in ensuring that the nuances of the original questionnaires are maintained and to avoid duplication of efforts. Another focus of the guideline is an emphasis on proper documentation and reporting, including justifications when the guidelines could not be followed. Finally, a checklist is included to help researchers and clinicians make informed choices about conducting or omitting any items, and reporting the process.

Although these procedures may seem labour intensive, they would result in a high-quality adaptation that is best suited to the target population. The authors strongly recommend this set of guidelines for future work on translating and adapting questionnaires.

References:

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