

Retaining Translated Verbal Reasoning Items

by Revising DIF Items

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Abstract

When a test is translated from a source language to a target language, the result is generally not two psychometrically equivalent tests. Analyzing the item, the basic element of the test, which sometimes functions differently across languages, can help in understanding the difference between the source and the target language tests. If the sources of differential item functioning (DIF) across languages could be predicted, this could have important implications for test adaptations. In addition, the likelihood of producing items that do not have DIF can be increased by revising items with DIF. The results of Allalouf, Hambleton & Sireci (1999) served as the basis for the current study. In that study, verbal reasoning items – analogies, sentence completions, logic and reading comprehension items – that were administered in Hebrew and in Russian, were analyzed for DIF using the Mantel-Haenszel method. A panel of translators suggested reasons for the DIF in each item. These reasons included differences in word difficulty, item format, content and cultural relevance. The current study examines item revision as a tool for improving test adaptations. A panel of translators and researchers revised the DIF items previously detected in Allalouf et al. (1999), based on the reasons for DIF found in that study. The revised items were then re-administered. The challenge of the study was to reduce the DIF. The revised target language items were compared to the original source language items, and to the original translation. Results showed that the revision succeeded in reducing DIF: out of the 37 items that were revised by the panel, 27 exhibited reduced DIF (12 of which exhibited significantly reduced DIF), and eight exhibited increased DIF (two, significantly increased DIF). An attempt was made to determine which sources of DIF and which item types can be revised most effectively. Empirical guidelines for using a panel to reduce DIF are presented.