

# A Synopsis of the International Test Commission's Guidelines for Translating and Adapting Tests: Part I

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## Abstract

This is intended to be the first in a series of monthly articles outlining the International Test Commission's (ITC) Guidelines for Translating and Adapting Tests. The ITC guidelines are provided in a six-category format that includes the topics pre-condition, test development, confirmation, administration, scoring and interpretation, and documentation. It is the goal of this series to provide the motivation behind and an outline for the TTI Success Insights translation protocol.

## 1 Introduction

The International Test Commission's (ITC) stated goal is to assist in the exchange of information on test development and use among its members and affiliate organizations as well as with nonmember societies, organizations, and individuals who desire to improve test-related practices, see [3]. In support of this goal, the ITC has developed a series of guidelines ranging across a spectrum that includes comments on test use, quality control, test takers, and using tests for research, to name a few.

One of the major foci of the guidelines on test translation and adaptation, see [2], is to educate on the differences between translation and adaptation. The ITC states the following:

Test translation is probably the more common term, but adaptation is the broader term and refers to moving a test from one language and culture to another. Test adaptation refers to all of the activities including: deciding whether or not a test in a second lan-

guage and culture could measure the same construct in the first language; selecting translators; choosing a design for evaluating the work of test translators (e.g., forward and backward translations); ...

The guidelines are organized into six categories

1. Pre-conditions;
2. Test Development;
3. Confirmation [Empirical Analyses];
4. Administration;
5. Score Scales and Interpretation;
6. Documentation.

This article will briefly comment on the first topic above, Pre-condition, but will mainly focus on the second topic of Test Development.

Before going on to the guidelines, we present a short motivation for the importance of having validated test adaptation protocols. Figure 1.1 shows the emotional response of a multi-lingual individual to the word *enthusiastic* presented to

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## Reactions to the word *Enthusiastic*

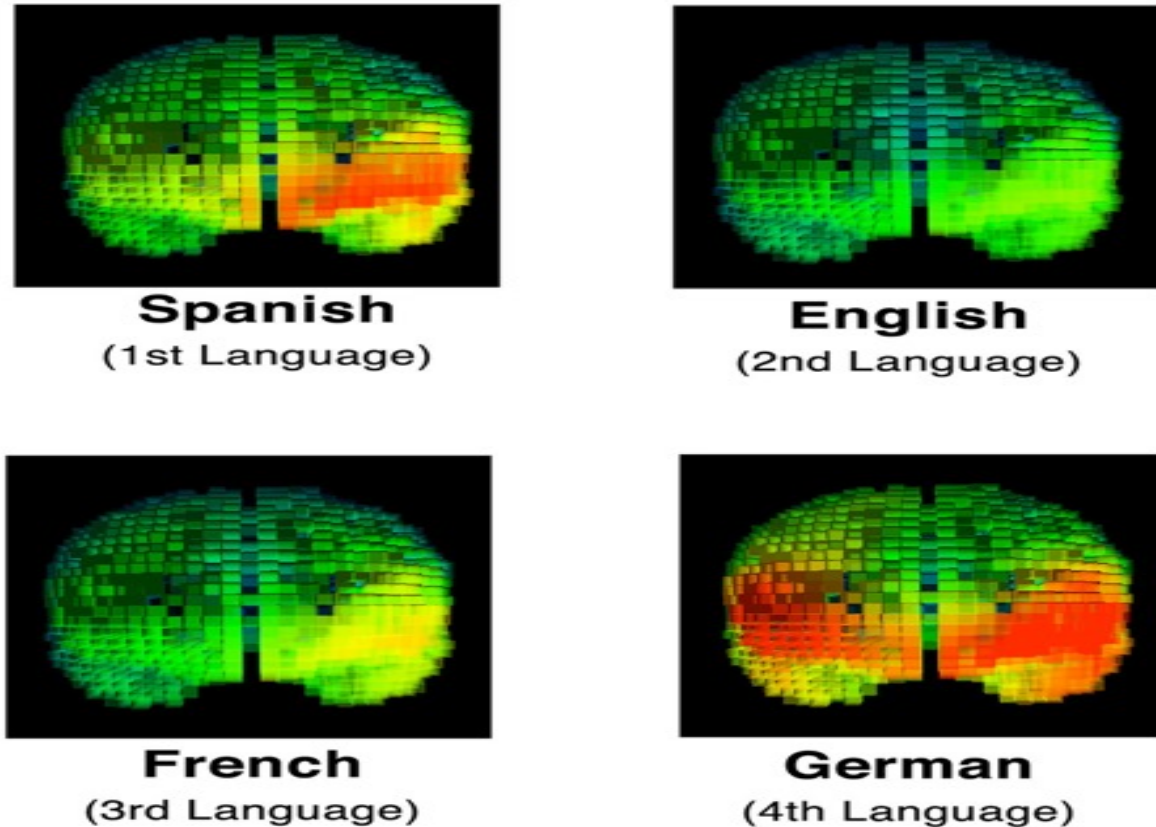


Figure 1.1: Emotional response to *enthusiastic*

the person in multiple languages. This person's native language is Spanish (Mexico). The following explanation of the brain images is taken from [1].

She showed the maximum positive response (left-side activation) to her native language (Spanish), a relatively neutral (no overt activation in either hemisphere) to English, a moderately positive response (some left side activation) to French, and a strong and complex response (activation on both sides) to German. This was consistent with the fact that she was more comfortable with languages like her own and found German difficult and requiring effort to understand.

## 2 Pre-conditions

There are three pre-condition guidelines in [2], the first of which is legal in nature, and the second two are centered on ensuring what is being assessed is sufficiently understood in the same way across all cultural and language groups of interest.

### PC-1

**Obtain the necessary permission from the holder of the intellectual property rights relating to the test before carrying out any adaptation.**

Given that most of the suite of TTI Success Insights assessments are developed by TTI Success Insights, PC-1 should generally not be a problem. However, to cover all bases, it is necessary

to at least document in some fashion that we do, in fact, have all necessary permissions.

## PC-2

**Evaluate that the amount of overlap in the definition and content of the construct measured by the test and the item content in the population of interest is sufficient for the intended use (or uses) of the scores.**

According to the explanation provided for this guideline in [2], this guideline requires that what is assessed should be understood in the same way across language and cultural groups, and this is the foundation of valid cross-cultural comparisons. Since the ITC refers to this concept as being foundational, it is critical to measure and report this in an appropriate manner. The ITC offers suggestions that experts with respect to the construct measured and who are familiar with the cultural groups being tested should be recruited to evaluate the legitimacy of the construct measured in each of cultural/linguistic groups.

## PC-3

**Minimize the influence of any cultural and linguistic differences that are irrelevant to the intended uses of the test in the populations of interest.**

The comments on this guideline from the ITC are centered around appropriate choices of translators. In summary, it is not enough to have individuals familiar with a language, even completely fluent in the target language. The translators must not only be native speakers of the target language, they must also be culturally knowledgeable, preferably native to the culture as well. It may be shown through the test adaptation process that it is not enough to have a single French translation, for example. It is necessary to determine whether large enough cultural differences exist between the various French speaking areas TTI Success Insights is associated with to have a significant impact on the

interpretation or uses of the output of a given assessment. We may find that cultural differences dictate that the French language version of an assessment developed for France may not be suitable for French speaking Canadians. Regardless, the protocols should outline and discuss how to document whether cultural or linguistic differences exist and impact test adaptation.

# 3 Test Development

## TD-1

**Ensure that the translation and adaptation processes consider linguistic, psychological, and cultural differences in the intended populations through the choice of experts with relevant expertise.**

The ITC explanation for this guideline includes a discussion of how it is of major importance to have translators that are knowledgeable in areas of the two languages in question as well as cultural understanding, and even looking for those with subject matter expertise and general knowledge of test construction. There is also a discussion of using a minimum number of translators (at least 2) along with various designs (e.g., forward and backward translations).

## TD-2

**Use appropriate translation designs and procedures to maximize suitability of the test adaptation in the intended populations.**

The main takeaway for this guideline is that the translation process should be focused on functionality of language, not literal translation. The language should feel as natural and acceptable in the target language as it does in the source language.

## TD-3

**Provide evidence that the test instructions and item content have similar meaning for all intended populations.**

Note that this is the first guideline to use the term *evidence*. Our interpretation of that is a need for data collection and analysis in some form. The ITC suggests the following possibilities:

1. Use reviewers native to the local language and culture;
2. Use of samples of bilingual respondents;
3. Use of local surveys to evaluate the test;
4. Use of non-standard test administrations to increase acceptability and validity.

The ITC also suggests that using small tryouts, conducting interviews of the administrators and respondents, and cognitive interviewing have shown solid success in test adaptation protocol settings.

#### TD-4

**Provide evidence that the item formats, rating scales, scoring categories, test conventions, modes of administration, and other procedures are suitable for all intended populations.**

The main concern expressed by the ITC in this setting is the possibility of confusion arising from the administration platform (e.g., an individual is not familiar with computerized testing) or rating scales (e.g., an individual has never seen a 5-point likert scale) and similar for the other areas above. It is suggested that either practice problems are provided or a thorough briefing accompany the assessment in some form.

#### TD-5

**Collect pilot data on the adapted test to enable item analysis, reliability assessment, and small-scale validity studies so that any necessary revisions to the adapted test can be made.**

This guideline should be fairly well understood. We need to conduct validity and reliability studies on every language into which any of our as-

sessments have or will be translated. This is obviously a tall order and shall take a good deal of time, especially for any languages which service smaller populations.

## 4 Summary

This article presents an outline of the Pre-condition and Test Development portions of the International Test Commission's Guidelines on Test Translation and Adaptation. We present these guidelines along with a short commentary on how we are set to interpret these guidelines in preparation for a full test adaptation protocol implementation. A forthcoming article addresses the next series of guidelines on Confirmation.

## References

- [1] Thomas F. Collura, Nancy L. Wigton, Carlos Zalaquett, SeriaShia Chatters-Smith, and Ronald J. Bonnstetter. The Value of EEG-Based Electromagnetic Tomographic Analysis in Human Performance and Mental Health. *Biofeedback*, 44(2):58–65, 2016.
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