Linguistic Validation of the
Rapid Assessment of Physical Activity

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INTRODUCTION

The linguistic validation of a physical activity instrument is the first step of a process called cultural adaptation which comprises two phases:
- a linguistic validation;
- a psychometric validation.

Linguistic validation

The linguistic validation of a questionnaire is not a literal translation of the original questionnaire, but the production of a translation which is conceptually equivalent to the original and culturally acceptable in the country in which the translation will be used.

In order to work towards the establishment of one recognised translation of an instrument in a given language the following points should be respected:

- the translation methodology should be respected and the different phases of the process summarised in a report;
- the translated version of a questionnaire - obtained if possible in collaboration with its developer - should be recognised as the official version in the country concerned. This will avoid the proliferation of "pirate" versions and will help to facilitate the access to translations;

Psychometric validation

The Scientific Advisory Committee of the Medical Outcomes Trust uses eight criteria in reviewing the psychometric adequacy of research instruments: 1) Conceptual and Measurement Model, 2) Reliability, 3) Validity, 4) Responsiveness, 5) Interpretability, 6) Respondent and Administrative Burden, 7) Alternative Forms, and 8) Cultural and Language Adaptations (Translations). Although it is rarely possible to evaluate all of these criteria in any single study, the goal is to address as many as possible, especially measurement model, reliability, and validity.

LINGUISTIC VALIDATION PROCESS

The aim of a linguistic validation of a physical activity questionnaire is the production of a version in a language other than the language of the original questionnaire which is conceptually equivalent.
The original language in which the questionnaire was developed is called source language. The language into which the questionnaire is translated is called target language.

After the recruitment of a consultant in each country concerned and having explained the concepts of a linguistic validation in detail, a physical activity instrument is then ideally translated according to the following methodology:

**STEPS**

1. "Forward" translation by two independent translators → forward version A1  forward version A2
2. Reconciliation between the two "forward" translations → forward version B
3. "Backward" translation by an independent translator → backward translation
4. Comparison of the source questionnaire with the "backward" translation by the local consultant → forward version C
5. Cognitive debriefing → forward version E
6. International harmonisation (if the original is translated into more than one language) → final version
7. Report

The questionnaire should always be considered as a whole (i.e., the response choices can influence the translation of the items and vice-versa).