ABC of Good Practice for the Translation and Cultural Adaptation of Self-Report Measures

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Cross-Cultural Adaptation

Cross-Cultural Adaptation" to describe the process that considers both language issues (translation) and cultural adaptation (idiom, cultural context and lifestyle) when modifying an existing questionnaire for another geographical setting or for people in a country that has diversity in languages and cultures (Epstein, Santo, and Guillemin 2015).

Translation + Adaptation

Translation is merely the first stage of the adaptation process.

processes concerning the cultural fit of the instrument beyond mere translation

Cross-Cultural Adaptation: **Why ?**

Most published measures of health status have been originally developed for, and validated in, English-speaking populations.

Globalization and migration have contributed to an increasing diversity of the population in many countries,

Quality care depends on the accurate assessment and deeper understanding of an individual's cultural, linguistic and ethnic background; (Increased fairness in assessment by allowing individuals to be assessed in the language of their choice)

Allows for compare the already-existing data with newly acquired data, thus allowing for cross-cultural studies both on the national and international level.

Conserve time and expenses and enhance generalizability

Allows for investigation of differences among a growing diverse population.

Possible scenarios for cross-cultural adaptation is required

Wanting to use a questionnaire in a new population described as follows:		Results in a change in.....			Adaptation required	
		Cultural	Language	Country of use	Translation	Adaptation
A	Use in same population. No change in culture, language or country from source	-------	------	------	-------	------
B	Use in established immigrants in source country	√	------	-------	-------	√
C	Use in other country, same language	√	------	√	-------	√
D	Use in new immigrants, not English speaking, but in same source country	√	√	------	√	√
E	Use in another country and another language.	√	√	√	√	√

Guideline for Cross-Cultural Adaptation

Best practice in cross-cultural adaptation is still a developing field, and numerous guidelines have been published.

A systematic review identified 31 guidelines for cross-cultural (Epstein, Santo, and Guillemin 2015).

The guidelines share many common elements, although there is no universal consensus among investigators on

- What is essential
- What is optional,
- No evidence of the superiority of one method over another
- No “gold standard”.

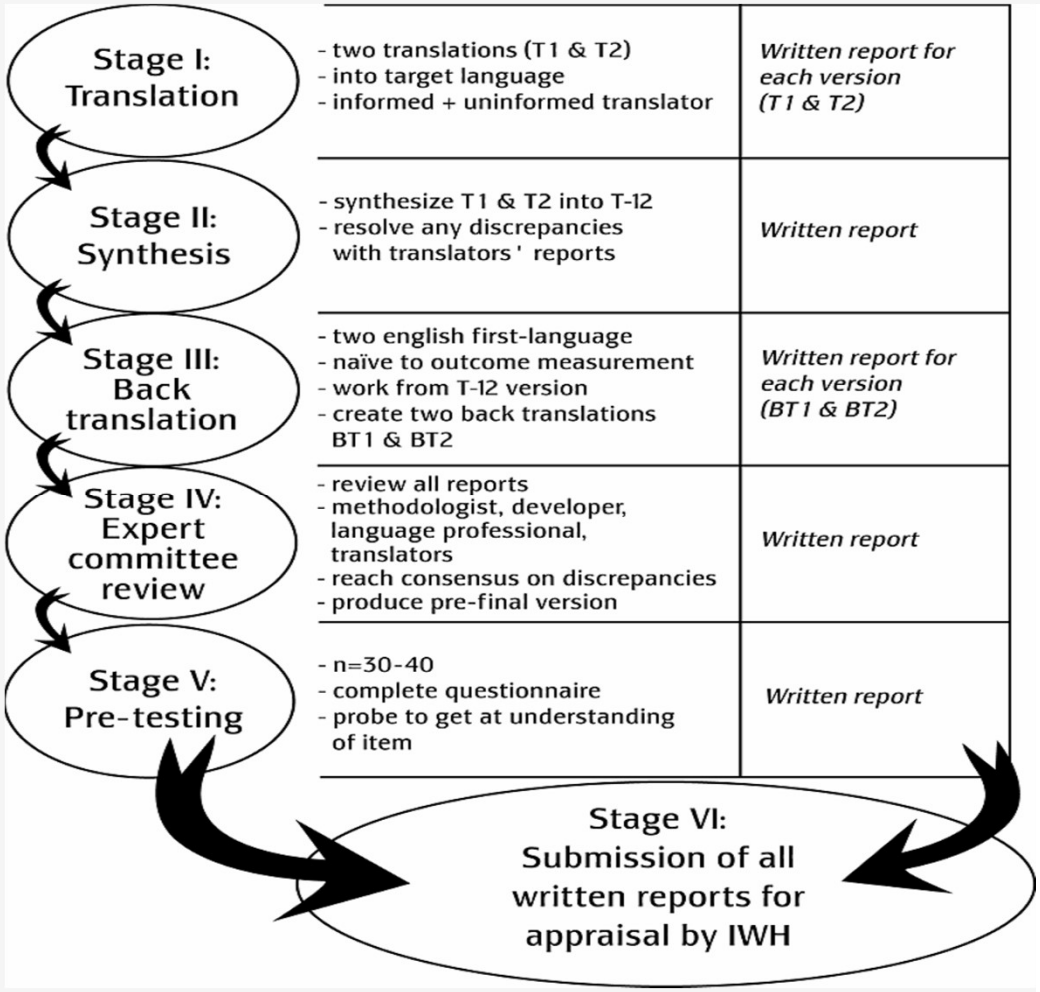
Guideline for Cross-Cultural Adaptation

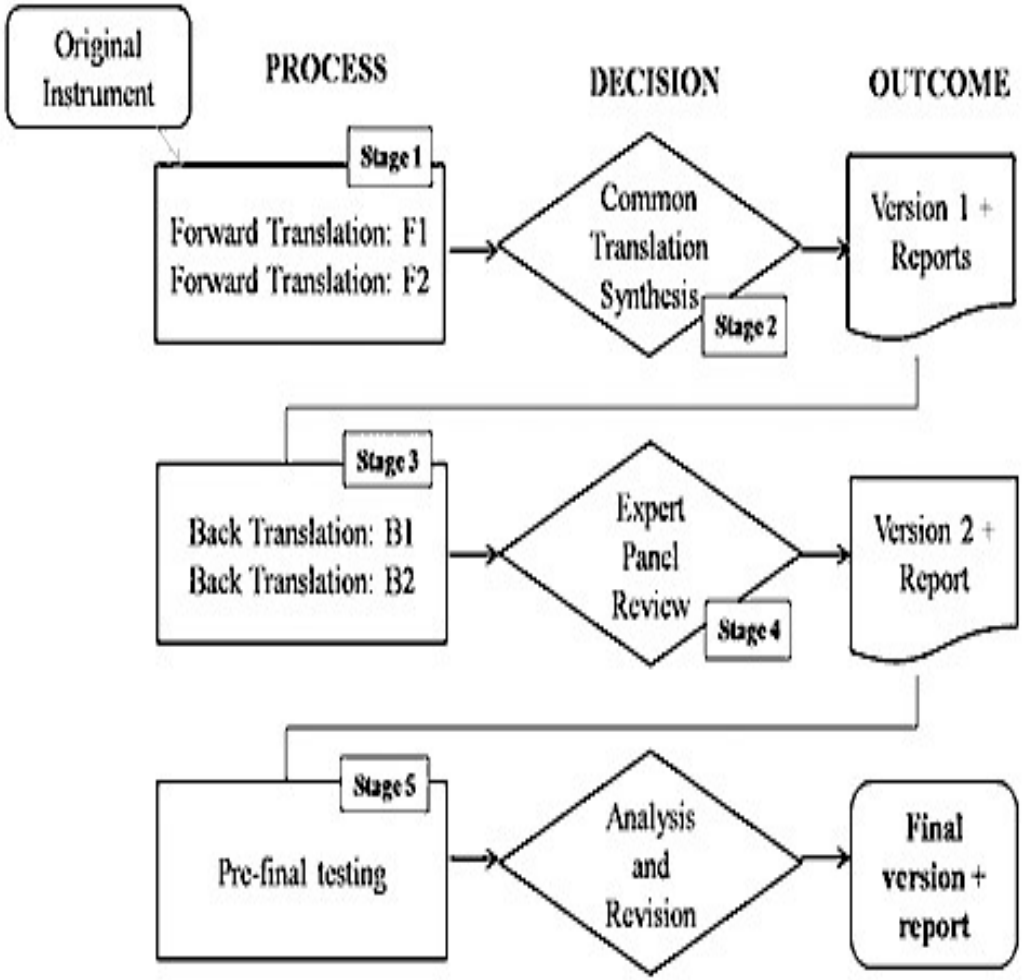
Adaptation process needs to follow a unique and rigorous method in order to ensure equivalence between the original and newly developed versions of the instruments (Beaton et al., 2000).

Guideline for Cross-Cultural Adaptation

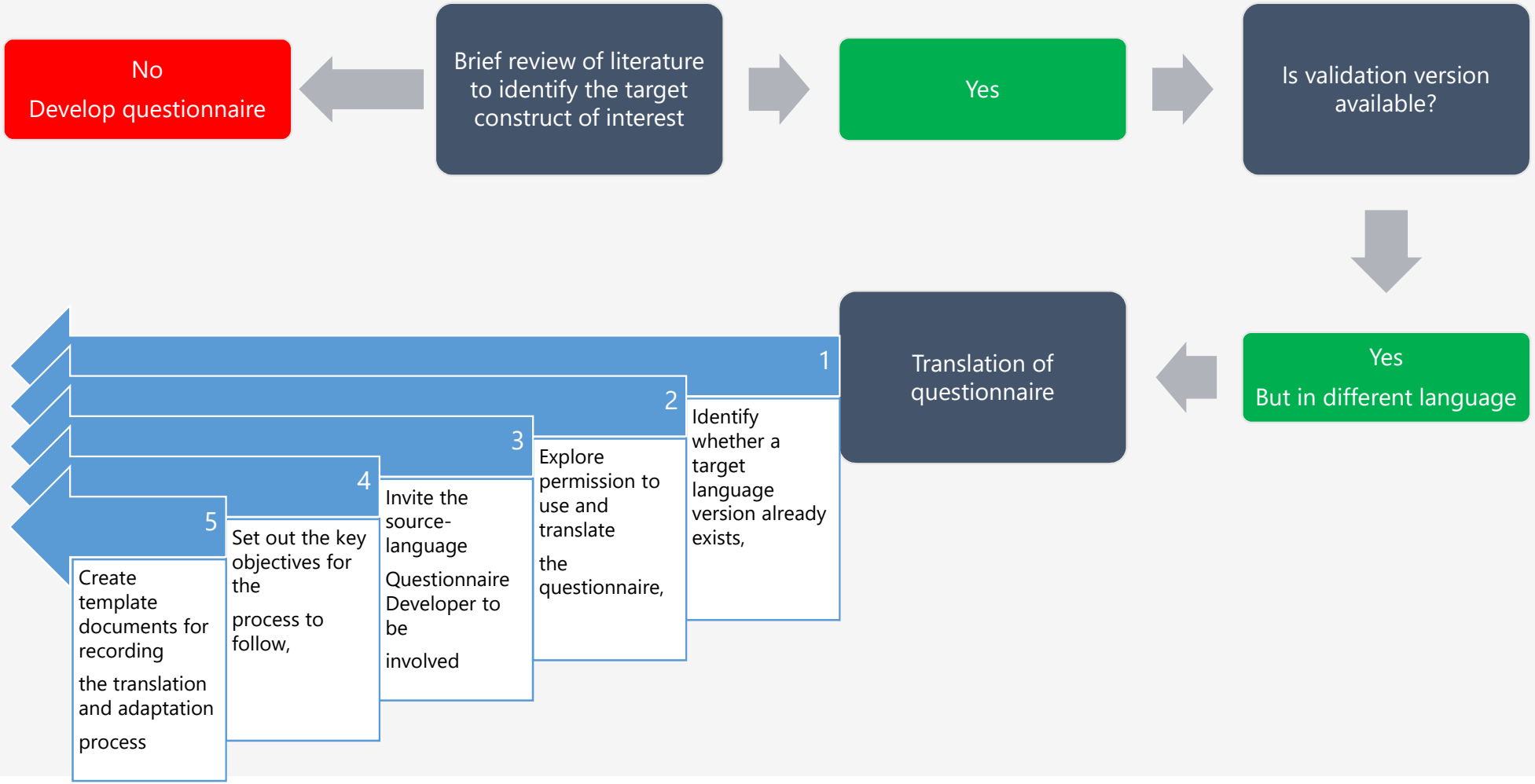
- American Association of Orthopedic Surgeons (AAOS)
- The European Organization for Research and Treatment of Cancer (EORTC) Group
- The European Quality of Life Instrument (EUROQOL) Group
- The European Group for Health Measurement and Quality of Life Assessment
- The Functional Assessment of Cancer Therapy (FACT) Group
- The International Quality of Life Assessment (IQOLA) Group
- The Medical Outcomes Trust (MOT)
- The World Health Organization (WHO)

Methodological steps used in the translation and cross-cultural



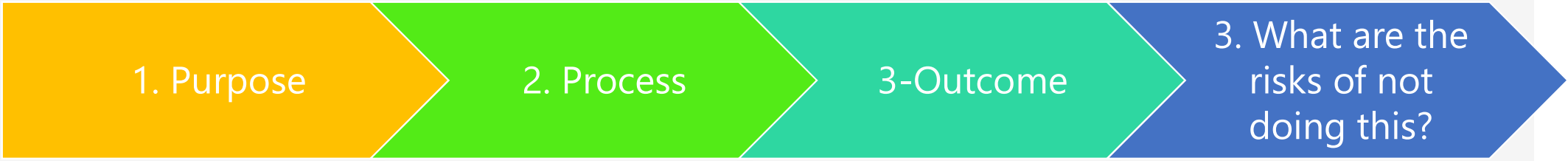


Before Cross-Cultural Adaptation



Translation and cross cultural adaptation process

Each step is described in the following ways:



Adaption process: Stage 1- Forward translation

Purpose: Instrument in the SL → translated to TL (TL1 and TL2) to produce two forward-translated versions of the instrument appropriate linguistic relevance and cultural representation

Process : at least Two bilingual and bicultural translators whose mother language is the desired TL, have distinct backgrounds : Two independent teams of translators can also be used

TL1 + TL2 = Forward translation

Informed(Medical Background) about the content area of the construct of the instrument in the TL.

knowledgeable about the cultural and linguistic nuances of the TL.

Instruct translators on the requirements of the translation (i.e. equivalence, accessibility, and acceptability of wording) and preferred terminology;
Working independently

Outcome written report summarizing all difficulties encountered, choices made or remaining uncertainties of (TL1 and TL2)

Adaption process: Stage 1- Forward translation

What are the risks of not doing this?

- Questionnaire may not be linguistically and culturally appropriate
- Questionnaire may differ from the source or not be useable by the target population
- Translation reflects an individual personal style and process is not transparent

Adaption process: Stage II: Synthesis

Purpose: Compare the TL1 and TL2, and to compare both the TL1 and TL2 with the SL version of the instrument.

Process :

- A third independent translator to compare the TL1 and TL2, and to compare both the TL1 and TL2 with the SL version of the instrument
- Regarding ambiguities and discrepancies of words, sentences and meanings.
- Consensus should be achieved with the participation of the third translator.

Outcome producing preliminary initial translated version of the instrument in the TL (PI-TL).

Adaption process: Stage 3- Backward translation

Purpose: The PI-TL → Back-translated to SL (B-TL1 and B-TL2) to produce two back-translated versions to make sure that the translated version is reflecting the same item content as the original versions

Process : Two bilingual and bicultural translators whose mother language is the SL, but who have distinct backgrounds:: Two independent teams of translators can also be used

The two translators should neither be aware nor be informed of the concepts explored, and should preferably be without medical background; Working independently; totally blind to the original version

Outcome written report summarizing all difficulties encountered, choices made or remaining uncertainties (B-TL1 and B-TL2)

Adaption process: Stage 4- Expertise committee

Multidisciplinary committee

(6-10memebers)

Methodologist

Health care professional & language professionals

All four bilingual and bicultural translators used in Step 1 and Step 3:

Developer of the original instrument

Step 4: Expertise committee meeting

If ambiguities and discrepancies cannot be resolved, Steps 1 through 4 may be repeated as many times as necessary. Alternatively, only items that do not retain their original meaning are re-translated and back-translated.

Discussion and Consensus

Evaluate similarity of the instructions, items and response format regarding wording, sentence structure, meaning and relevance.

Pre-final version of the instrument in the target language

Adaption process: Stage 4- Expertise committee

Multidisciplinary committee (6-10memebers)

- Methodologist
- Health care professional & language professionals
- Translators (Step 1 and Step 3)
- Developer of the original instrument

Purpose

develop the pre-final version of the questionnaire in TL for field testing.

Adaption process: Stage 4- Expertise committee

Process (decisions making)

Comparison between the two back-translations (B-TL1 and B-TL2) of the instrument, and between both BTL1 and B-TL2 and the original SL instrument

Evaluate similarity of the instructions, items and response format regarding wording, sentence structure, meaning and relevance.

The expert committee is making critical decisions between the source and target version in four areas1

Semantic Equivalence. + Idiomatic Equivalence + Experiential Equivalence + Conceptual Equivalence

If ambiguities and discrepancies cannot be resolved, Steps 1 through 4 may be repeated as many times as necessary
Alternatively, only items that do not retain their original meaning are re-translated and back-translated.

Adaption process: Stage 4- Expertise committee

Semantic equivalence	Do the words mean the same thing? Are their multiple meanings to a given item? Are there grammatical difficulties in the translation?
Idiomatic equivalence	Colloquialisms, or idioms, are difficult to translate. The committee may have to formulate an equivalent expression in the target version
Experiential equivalence	Items are seeking to capture and experience of daily life; however, often in a different country or culture, a given task may simply not be experienced (even if it is translatable).
Conceptual equivalence	the degree to which a concept of the items of the instrument exists in both the source and target cultures.

Adaption process: Stage 4- Expertise committee

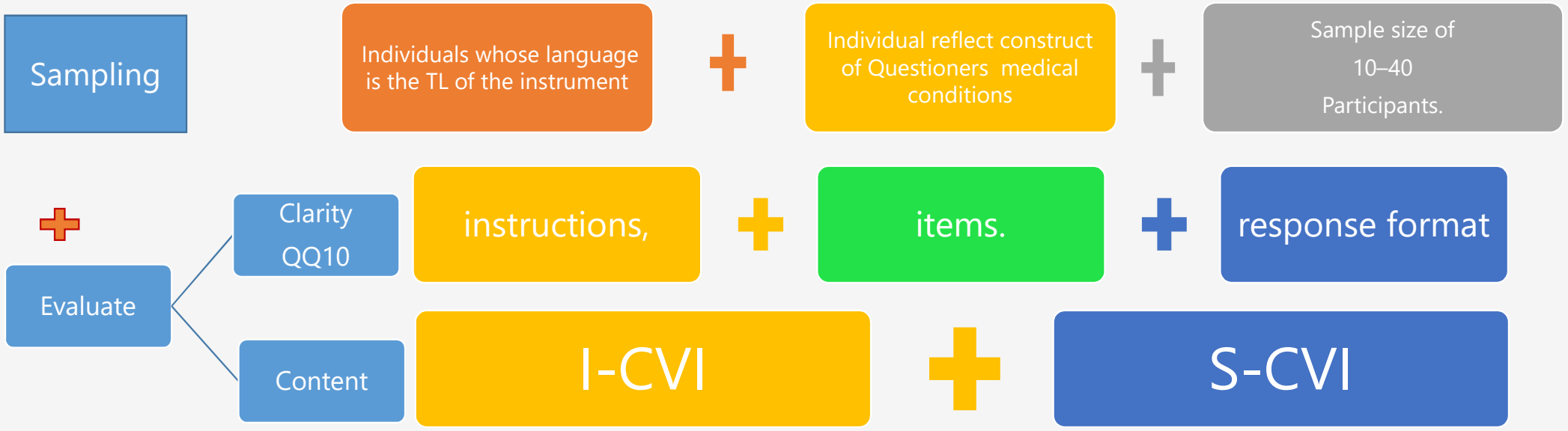
What are the risks of not doing this?

Cross-cultural equivalence may not be achieved

Translation includes differences between language versions making it difficult to conduct comparisons

Adaption process: Stage 5: Test of the Pre-final Version

Purpose: Pilot test of the P-FTL



Review the results of the field testing and finalize the translation

Formatting and proofreading the finalized translation

Adaption process: Stage 6

Stage VI: submission of documentation to the developers or coordinating committee for appraisal of the adaptation process.

This is a process to ensure that all steps have been performed and fully documented.

Step 7: Full psychometric testing of the Pre-final version

Full psychometric testing of the P-FTL among individuals from the target population to:

1
- Revise and refine the items of the final version of the instrument in the TL.
- Establish internal consistency stability reliability, homogeneity,
- Establish construct-related validity, criterion-related validity, and factor structure

2 Use at least 3-10 subjects per item of the instrument for general psychometric approaches (scale and item analysis, Pearson's correlations and exploratory factor analysis).

3 Use 100–300 subjects for confirmatory factor analysis or conduct a power analysis.

More questions about PowerPoint?