

Translation Guidelines for the Self-Efficacy Scale for Voice Modification in Trans Women (SES-VMTW) and the Trans Woman Voice Questionnaire (TWVQ)

The procedure for translating the SES-VMTW and the TWVQ is based on the *Process of Translation and Adaptation of Instruments* as set out by the World Health Organisation (WHO) and currently unavailable online.

The aim of this process is to achieve different language versions of the English instrument that are conceptually equivalent in each of the target countries/cultures. That is, the instrument should be equally natural and acceptable and should practically perform in the same way. The focus is on cross-cultural and conceptual, rather than on linguistic/literal equivalence. A well-established method to achieve this goal is to use forward-translations and back-translations.

Implementation of this method includes the following steps:

1. Forward translation
2. Expert panel back-translation
3. Pre-testing and cognitive interviewing
4. Final version

1. Forward translation

One translator, preferably a health professional, familiar with terminology of the area covered by the instrument should be given this task. The translator should be knowledgeable of the English-speaking culture, but their mother tongue should be the primary language of the target culture. Instructions should be given in the approach to translating, emphasizing conceptual rather than literal translations, as well as the need to use natural and acceptable language for the broadest audience.

The following general guidelines should be considered in this process:

- Translators should always aim at the conceptual equivalent of a word or phrase, not a word-for-word translation, i.e., not a literal translation. They should consider the definition of the original term and attempt to translate it in the most relevant way.
- Translators should strive to be simple, clear and concise in formulating an item. Fewer words are better. Long sentences with many clauses should be avoided.
- The target language should aim for the most common audience. Translators should avoid addressing professional audiences such as those in medicine or any other professional group. They should consider the typical respondent for the instrument being translated and what the respondent will understand when they read the question.
- Translators should avoid the use of any jargon. For example, they should not use:
 - technical terms that cannot be understood clearly; and colloquialism, idioms or vernacular terms that cannot be understood by common people in everyday life.

2. Expert panel

A bilingual (in English and the target language for translation) expert panel should be convened by a designated translation team leader (TTL). The goal in this step is to identify and resolve the inadequate expressions/concepts of the translation, as well as any discrepancies between the forward translation and the existing or comparable previous versions of the items if any. The expert panel may question some words or expressions and suggest alternatives. Experts should be given any materials that can help them to be consistent with previous translations. Principal investigators and/or project collaborators will be responsible for providing such materials. The number of experts in the panel may vary. In general, the panel should include the original translator, a speech pathologist, as well as experts with experience in instrument development and translation.

The result of this process will produce a complete translated version of the questionnaire.

3. Back-translation

Using the same approach as that outlined in the first step, the instrument will then be translated back to English by an independent translator, whose mother tongue is English and who has no knowledge of the questionnaire.

As in the initial translation, emphasis in the back-translation should be on conceptual and cultural equivalence and not linguistic equivalence.

Discrepancies should be discussed with the TTL and further work (forward translations, discussion by the bilingual expert panel, etc.) should be iterated as many times as needed until a satisfactory version is reached.

Particularly problematic words or phrases that do not completely capture the concept addressed by the original item should be brought to the attention of the SES-VMTW/TWVQ representative (La Trobe University) who provided permission for the translation.

4. Pre-testing and cognitive interviewing

- a. It is necessary to pre-test the instrument with trans women.
- b. Pre-test respondents should number 10 minimum. They should represent trans women from all age groups (18 years of age and older) and different socioeconomic groups.
- c. Pre-test respondents should be administered the instrument and asked about the questionnaire. Each person should be asked what they thought the questionnaire was asking, whether they could repeat the items in their own words, what came to their mind when they heard a particular phrase or term. It should also ask them to explain how they choose their answer. These questions should be repeated for each item.
- d. The answers to these items should be compared to the respondent's actual responses to the instrument for consistency.
- e. Respondents should also be asked about any word they did not understand as well as any word or expression that they found unacceptable or offensive.
- f. Finally, when alternative words or expressions exist for one item or expression, the pre-test respondent should be asked to choose which of the alternatives conforms better to their usual language. This information is best accomplished by in-depth personal interviews although the organization of a focus group may be an alternative. It is very important that these interviews be conducted by an experienced interviewer.

g. A written report of the pre-testing exercise, together with information about any difficulties the respondents had interpreting the questions will be required.

5. Final version

The pre-final version of the instrument in the target language should be the result of all the iterations described above. It is important that a serial number (e.g., 1.0) be given to each version. This version will be sent to the SES-VMTW/TWVQ representative (LU) for final approval and formatting.

6. Documentation

All the cultural adaptation procedures should be traceable through the appropriate documents. These include, at the least:

- Initial forward version.
- A summary of recommendations by the expert panel.
- The back-translation.
- A summary of problems found during the pre-testing of the instrument and the modifications proposed; and
- The final version.

It is also necessary to describe the samples used in this process (i.e., the composition of the expert panel and the pre-test respondent samples). For the latter, the number of individuals as well as their basic characteristics should be described, as appropriate.