Research Questionnaire Translation Toolkit

When hosting health education sessions, health fairs, or other APAMSA events in your local community, there are valuable opportunities to collect data that can help us better understand and serve the AANHPI population. One effective method is using validated questionnaires to assess participants' knowledge, experiences, attitudes on specific health topics, or the effectiveness of educational interventions. However, the language barrier is one of the biggest challenges in doing so. Therefore, this toolkit was developed to not only support the translation of research questionnaires but to adapt educational materials—such as pamphlets and flyers—for diverse communities.

What is the purpose of this toolkit?

Conducting research with translated surveys in the audience's language is essential for collecting accurate, meaningful data. Using only English surveys can exclude or misrepresent community members with limited English proficiency, leading to biased results and underreporting of needs. *This is especially important for Southeast Asian, South Asian and Native Hawaiian and Pacific Islander communities, who are often underrepresented in research and lumped together as "Asian" despite having diverse experiences and needs.* Using translated surveys helps amplify these communities' voices, ensuring they are seen and heard in research to better understand factors that affect their health and well-being**.**

What is a validated questionnaire?

A validated questionnaire is a set of questions that has been tested to ensure it accurately measures what it is meant to measure. Using validated surveys is helpful because they already have a sufficient level of both reliability and validity making it more efficient than creating an entire new set of questionnaires.

How to find a validated questionnaire?

1. **Identify relevant questionnaires:** Review previous literatures on the topic you are studying and surveys or scales they used.
2. **Locate the original source:** Find the original publication that describes the development and validation of the survey, or search for the scale name online to gather more information.
3. **Request permission and translation guidelines:** Email the researcher who developed the survey to request permission to use it and to ask if they have guidelines for translation.

Email Template

Subject: Request to use and translate [Survey Name] for community-based research

Dear Dr. [Last Name],

My name is [Your Name], and I am [your role, e.g., a student at school, APAMSA position working on a research project with my local AANHPI communities ect.]. I came across your [survey/scale], [Survey Name], in your publication, [Paper Title]. I am interested in using it for a project focusing on [briefly state your topic] and would like to request your permission to use the survey. I believe your work aligns closely with the objectives of my research

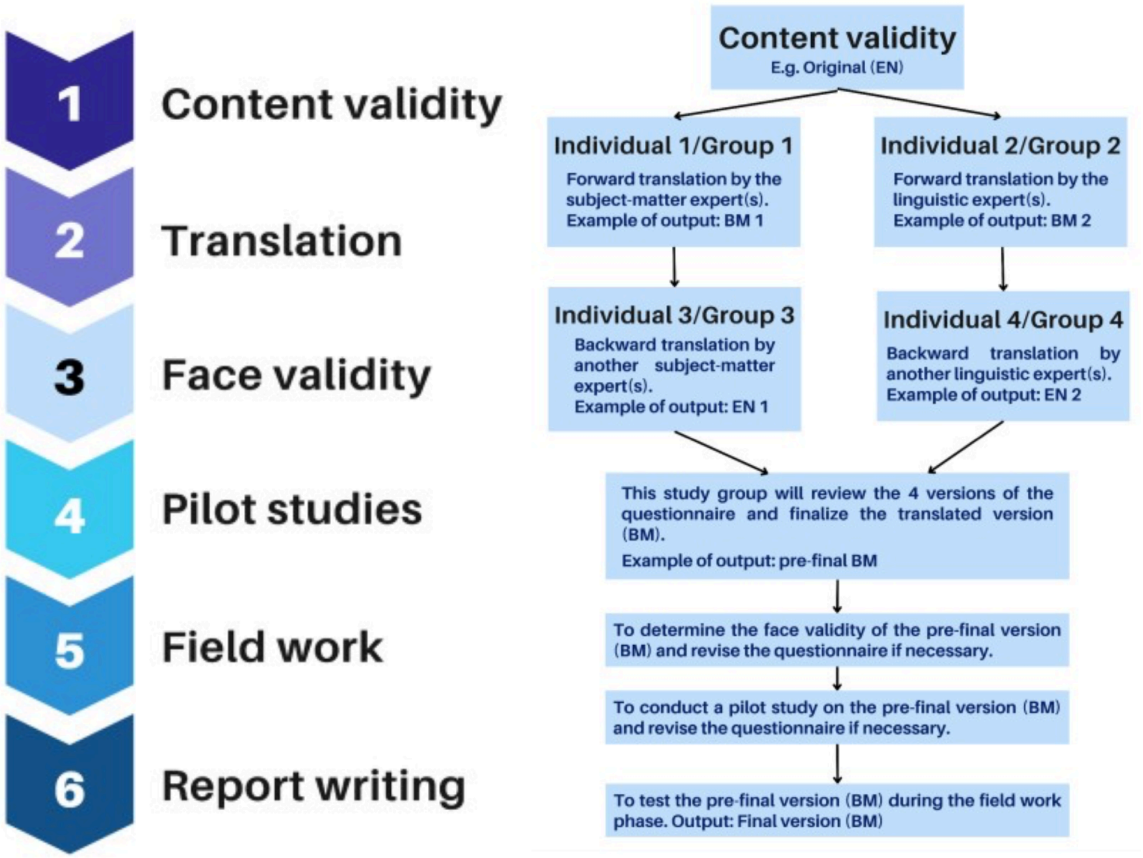
Additionally, we would like to translate the survey into [language(s)] to ensure accessibility for participants. If you have guidelines for translation and use, we would greatly appreciate you sharing them with us. A full credit will be given to your work in any publications or presentations resulting from this study.

Thank you for your time and consideration, and for the important work you have done in developing this tool. Please let us know if you require any additional information.

Best regards,

[Your Name]
[Your Title/Organization]
[Your Email]
[Your Phone Number (optional)]

How to appropriately translate the validated questionnaires? (Step-wise)



1. **Content validity:** Content validity should be assessed by evaluating how well the survey measures its intended objectives, ideally in collaboration with researchers or faculty experienced in the subject matter.
2. **Translation:**
    a. Forward translation (from EN to a target language): Conducted by 2 independent translators from those whose first language is the target language and their second language is English
    b. Backward translation (from a target language to EN): Conducted by 2 independent translators from those whose first language is English and the 2nd language is the target language
    c. Review: translators and researchers compare drafts and resolve discrepancies.
        i. **Cultural consideration**
            1. When adapting questionnaires, psychological meaning is often more important than direct translation. Since language evolves and varies by region, adapting both language and cultural context is key to maintaining functional equivalence.

Types of Equivalence to Consider:

a. **Semantic Equivalence:** Ensure the meaning of each item is preserved, not just the words. Emotional or ambiguous terms may require clarification or replacement to maintain the intended interpretation.
b. **Cultural and Experiential Relevance:** Adapt concepts, examples, metaphors, and described situations to reflect what is appropriate and familiar in the target population's lived experiences. Western psychological constructs or scenarios (e.g., driving a car) may need rephrasing to match local realities.
c. **Idiomatic and Conceptual Equivalence:** Replace figurative language (e.g., "feeling blue") with culturally appropriate expressions. Broader constructs like "independence" or "mental health" may not translate directly or carry the same meaning and should be reframed in culturally relevant ways.

Cultural Examples by Country:

a. Vietnam **(Semantic Equivalence)**
    i. The Vietnamese word "buồn" spans a range from boredom to deep sadness.
    ii. Using only "buồn" in the U.S. Vietnamese community may cause confusion when asking "Do you feel sad?"
    iii. A stronger term like "buồn rầu" may be used to convey deeper emotional distress.
b. Cambodia **(Cultural and Experiential Relevance)**
    i. Khmer expression of distress: "kut caraeun" or "thinking too much."
    ii. Asking about "sadness" or "hopelessness" may miss this culturally specific idiom.
c. Indonesia **(Idiomatic and Conceptual Equivalence)**
    i. "Independence" in Western terms (living alone, autonomy) may not align with collectivist values.
    ii. Living with parents is seen as normal and respectful.

3. **Face validity :** Face validity is a qualitative process that assesses whether the questionnaire measures what it intends to and is presented to the audience accurately.
    a. "cognitive debriefing process": involves personal interviews or other assessments with a small group of representatives of the target population **(6-10 participants)**

b. Participants are asked if they can reformulate the ideas of the questionnaire in their own words and can provide suggestions for making any necessary changes to improve the survey based on participant feedback

c. Add more questions or modify wording if there is low to moderate reliability

4. **<u>Pilot studies:</u>** A pilot study can be done before the intended survey is completed on the target population to determine the reliability of the survey. A pilot study is a quantitative, small-scale **(20-50 respondents)** preliminary study to evaluate the feasibility of the survey to answer the study's questions. The sample chosen should be representative of the target focus group, so a wide and diverse range of people within that population.
    - **a. Reliability testing**
        - **i. Internal consistency - Cronbach's Alpha:** Internal consistency measures how well items on a questionnaire relate to each other and assess the same concept. Researchers can remove, edit, or add questions depending on this value, and Cronbach's Alpha needs to be recalculated for pilot testing AND subsequent validation stages during field work.
            1. Given a questionnaire x, with k number of items or questions, alpha (α) can be computed as: $\alpha = \frac{\kappa}{\kappa - 1}(1 - \frac{\sum \sigma_i^2}{\sigma_x^2})$
                a. Where, σ_i^2 is the variance of item i, and σ_x^2 is the total variance of the questionnaire.
            2. Cronbach's alpha (α) ranges from 0 to 1:
                a. α = 0 means no consistency (items are not related).
                b. α = 1 means perfect consistency (all items are highly related).
                c. A value of α ≥ 0.70 is considered acceptable, but low α can indicate unrelated or poorly written items, which may need to be removed or revised.
                d. α ≥ 0.90 may indicate redundancy (items are too similar)
        - **ii. Test Re-test**
            1. Test re-test reliability measures the consistency of questionnaire responses if a person answers the same questionnaire again at a later time point. It can be evaluated using Pearson's r, Intraclass Correlation Coefficient (ICC), or Cohen's kappa. Consult
                a. The average time interval between the first and second administration of a questionnaire is typically

1-2 weeks. However, the optimal interval depends on its purpose and content. Researchers should consult experts or previous literature in the field to select an appropriate timeframe. If the gap is too short, participants may recall their previous answers; if too long, their responses may change due to other variables.

b. For example, questionnaires assessing psychological state may need shorter time in between taking the survey again, such as a few days or weeks. Other tests asking about personality or chronic illnesses may need longer timeframes, spanning across weeks or months.

iii. See the appendix for additional resources and types of validity and reliability testing. We recommend consulting your school's statistician or research coordinator for further assistance with validity and reliability analyses.

5. **Field Work:** Conduct the same measures of your validated questionnaire from your pilot study to your actual sample population.
6. **Report Writing:** Conduct data analyses gathered from your study and report on your findings and future implications of the use of your validated questionnaire.

What are some ways to find translators?

1) We made a sign-up sheet for APAMSA and community members to volunteer to help with translation. You can access the spreadsheet here.
2) You can contact local AANHPI organizations and rely on their expertise and community members for help.
3) Professional Translators. This often costs money. However, if you do have the funding through your school for student research, this option is recommended.

How to utilize APAMSA volunteer translators:

1. Email the translator and include the following information
    a. Language you would like to translate
    b. Files you would like to translate
    c. Purpose of the material and target audience
    d. When do you need it by
    e. Other considerations or comments for the translators
2. **Please make sure to give appropriate credit to all of the translators involved in your project on any poster presentations or publications**
    a.

If you can't find a translator for a language that is not already listed on the spreadsheet, please complete this form to submit any requests.

Thank you for visiting our toolkit! And congratulations on completing your project!

If you have utilized the APAMSA Research Questionnaire Translation Toolkit, please complete this form to help us track its use and identify any improvements we can make.

If you have any questions please contact us at SEAdirector@apamsa.org and research@apamsa.org

– APAMSA Southeast Asian Committee and Research Director –

References

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Appendix

Reliability and validity testing resources:
https://pmc.ncbi.nlm.nih.gov/articles/PMC5463570/#sec1-5
https://zenodo.org/records/6801209

Example cross-cultural translation research
https://www.cell.com/heliyon/fulltext/S2405-8440(23)04654-6?_returnURL=https%3A%2F%2Flinkinghub.elsevier.com%2Fretrieve%2Fpii%2FS2405844023046546%3Fshowall%3Dtrue