Feasibility of Audio Computer Assisted Self-interviewing with Color-Coding and Helper Assistance (ACASI-H) for Survey Completion

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Background

➢ Racial and ethnic minorities experience health disparities.

➢ Increasing number of non-English literate older adults from collectivist cultures in the United States.

➢ Researchers and health care providers face challenges collecting health data from non-English literate older adults.

➢ More research is needed to develop culturally appropriate data collection tools.

➢ Sample rationale: Older Hmong
  ✓ Collectivist culture
  ✓ Migrant
  ✓ Non-English speaking and non- literate in their first language

Purpose

Determine feasibility and acceptability of a culturally tailored data collection mode using:
➢ Oral survey delivery
➢ Color response items
➢ Inclusion of family member helper

Acknowledgements

Data Collection Tool

Qualtrics:12-Item Short Form Health Survey (SF-12)

Methods

➢ **Design:** Mixed-methods
➢ **Sample:** 30 older Hmong & 30 Hmong family helpers
➢ **Setting:** community centers & home
➢ **Data Collection:**
  ✓ Audio computer assisted self-interviewing with color-coded response items and helper assistance (ACASI-H)
  ✓ Video recording
  ✓ Follow-up interviews

Results

➢ All 30 dyads completed the 13-item instrument with **zero missing data**
➢ ACASI-H completion time: between 11 and 50 minutes (**average of 20 min**)

Feasibility of ACASI-H
- **Questions consistent with health experience**
  - "Yes. It [referring to the questionnaire] is consistent for me. It is correct like the question asked."(Elder 1)
- **Interface is user friendly**
  - "The volume is high enough, and I can listen to it."(Elder 13)
- **Lack computer experience**
  - "I have never touched it [the laptop] before…I don't even know where to start with touching it."(Elder 2)

Feasibility of the Hmong Pre-Recorded Audio Translation of Questions
- 29 out of 30 (90%) used the Hmong translation
- Frequency of times the Hmong translation was played 8-13 (mean of 12)
- Translation was **clear and understandable** in the Hmong language
  - "The translation was clear"(Elder 1)

Acceptability of Response Categories Labeled With Color
- **Pros**
  - Useful substitution for words
  - Increase recall
- **Cons**
  - Cultural associations
  - Distracting
  - "I do like it [the colored response items]. If there is no colors then I wouldn't know how to answer." Elder 27)

Acceptability of Family Member Inclusion
- Older Hmong confirmed family helper was helpful.
- **Helper roles**:
  - Assist in navigating the technology
  - Provide clarifications when older Hmong do not understand the question & color response categories
  - Help select most accurate response for each question

Discussion

➢ This mode of data collection was culturally and linguistically appropriate for both members of a family dyad, who differ in familiarity with the native (Hmong) language and comfort with technology and who live within a collectivist culture.
➢ Practice questions prior to taking the actual questionnaire may help familiarize older Hmong and reduce confusion for color coded response items