



Audio Recording at Statistics Canada

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Lecily Hunter, Assistant Director
Collection Planning and Management Division,
Statistics Canada

Overview

- Technical evaluations and solutions
- Audio recording of cognitive measure questions
- CAPI Monitoring project
- Lessons learned and future directions

Technical evaluations and solutions

- Microphones, recording software, integration with Blaise, transmission
 - External microphones provide better sound quality
 - Use default Windows recording, then use open-source software to compress audio files
 - Explicit calls in Blaise application to turn recording on and off; uses procedure developed by RTI, where a .dll is called from Blaise alien router
 - File sizes a concern, even with compression; we will be moving from telephone to internet transmission to deal with volume

Audio recording of cognitive measures

- Healthy Aging survey contains cognitive tasks to test memory and concentration; time limits on each task
- 78% response rate to survey
- Respondents asked questions such as: listen to a list of 15 words, and then recall as many as they could in 90 seconds; name as many animals as they could in 60 seconds
- Initially tested with interviewers trying to write down responses – too hard to capture everything
- Piloted with audio recording, and implemented in main collection

The cognition module contains 4 timed tasks related to memory and concentration. These should be performed in a quiet area where there is little chance of disturbance.

The first task is a memory test that requires the respondent to learn a list of 15 common words and recall them immediately within 90 seconds.

The second task tests verbal fluency requiring the respondent to name as many animals as they can in 60 seconds.

The third task, the Mental Alternation Test, is broken into 3 sub-tasks. First, the respondent is asked to count from 1 to 20, then they are asked to recite the letters of the alphabet, and finally they are required to alternate numbers and letters, for example, 1, A, 2, B, 3, C, etc., each within 30 seconds.

In the fourth task, the respondent has 60 seconds to recall as many of the 15 words as they can from task 1.

CAPI Monitoring Project



- Objectives:
 - Measure field interviewer performance
 - Improve data quality

- Methodology:
 - Audio recording
 - Formal monitoring strategy and feedback process

- Pilot test:
 - Canadian Community Health Survey, Nov/Dec 2008

CAPI Monitoring Strategy



- Record snippets of interviews
 - Easy and difficult question blocks, including entry/exit
- Transmit audio files daily from the field to head office
- Monitor
 - Listen to files based upon a sampling plan, assessing interaction between interviewer and respondent while following flow on a paper questionnaire
 - Note poor interviewing practices or errors, as well as positive techniques
- Produce reports and provide feedback

CAPI Monitoring – Pilot test plans

- Recording:
 - consent question: “Some of this interview may be recorded for the purpose of quality control. Do you agree to being recorded?”
 - 7 pre-identified blocks of questions (representative of interviewer skills) with maximum time of 8 minutes total
- Transmission over telephone lines
- Planned for approximately 300 expected respondents (85% cooperation rate = 265 interviews recorded) from 3 sites (Calgary, Winnipeg, Montérégie)
- Approximately 25 interviewers, 3 monitors

CAPI Monitoring – pilot test results

- Sample size: 501 dwellings
 - In-scope: 440 households
 - Response: 294 responses (67%); 242 were face-to-face interviews
- Agreement to record: 78.5% agreed (191/242)
- Feedback from respondents:
 - Generally, not worried about being recorded; some expressed privacy concern
 - Most said they did not think about the recording during the course of the interview, and knowing they were being recorded did not influence their answers

The final response rate for CAPI Monitoring was Quebec - 76.6% and Edmonton - 62.8%. The final response rate for our regular sample was Quebec - 76.2% and Edmonton - 73.7%. There are a number of factors that may have contributed to the difference, ie. collection started late for the monitoring sample and some of the monitoring sample was in established low response areas.

CAPI Monitoring – pilot test results

- Feedback from interviewers:
 - Some wariness; knowing they are being recorded is stressful
 - Interviews already difficult, this is one more hurdle for interviewers to overcome
 - Some welcomed getting feedback on their performance
 - One suggested having the ability to record practice interviews with family members and be able to play back to hear how they sound
- Feedback from monitors:
 - Some concerns about sound quality
 - Responses sometimes cut off at end of recording
 - Need better UI to allow monitors to see responses entered into application, while listening to recording

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Lessons learned



- Need better communication plan and training exercises so interviewers are at ease with conducting the interviews and so that they understand how the recordings will be used and the type of feedback they will receive
- Sound quality issue needs to be resolved – auto-detect use of external microphone
- If imposing time limits on recording question blocks, may need to adjust those limits based on how often the limit is met
- Need to improve procedures for monitors to conduct and provide feedback

Future work



- Recommend staged rollout for implementation of CAPI Monitoring Program, so we can build on lessons learned
- Extend use of recording for QA of content
 - Quality assessment of content by subject-matter areas
 - Data quality improvements through measures of keying and coding errors
- Extend use of recording for collection of content
 - “other-specify” and open-ended questions could benefit from recording responses and coding later
- Training
 - Incorporate recordings into interviewer skills training programs – listen to pre-recorded examples of good and bad interviews; allow interviewers to record and listen to themselves

Contributors

- Caroline Pelletier, Methodologist
- Joanne Bachelor, Project Manager
- Anne Lostracco, Collection Manager
- Eric Joyal, Programmer