Collecting Interviewer Observation Data via a Mobile Survey: Lessons Learned

Jennifer Kelley
Peter Sparks
September 24, 2013

Washington, D. C.
Outline

• Introduction
• Technical Systems
• Implementation
• Field Test
• Future Steps
Introduction

• National face-to-face survey
• Interviewer paper and pencil obs during ACASI
  ▪ Increased risk for measurement error
  ▪ Increased risk for processing errors
  ▪ Increased interviewer's administrative time
• Goals for adapting to mobile (Android)
  ▪ Increase interviewers’ efficiency
  ▪ Reduce errors
  ▪ Reduce paper waste
Technical Systems

• Three software applications were examined
  ▪ Open Data Kit (ODK)
  ▪ Illume
  ▪ Blaise IS

• Evaluated on
  ▪ Usability
  ▪ Coverage
  ▪ System compatibility
  ▪ Development time and cost
Open Data Kit (ODK)

- “App” on mobile phone
- Programmed via Excel spreadsheet or web form
- Specialized for Android platform
- Uses native phone features
- Surveys can be completed offline
  - Stores data on phone until it is sent to server
- Open source
- Lacks certain features of Illume and Blaise IS
Illume

- Server-based interviewing system with web-based sample management features
- Create surveys via an editor program
- Stored as XML files
- Formatting optimized for desktop
- Requires constant connection to Illume server
- Considerable effort to optimize for mobile phone
Blaise IS

- Server-based interviewing system with web-based sample management features
- Performs complex calculations
- Very flexible
- Requires constant connection to Blaise IS server
- Has form-based (offline) survey with limitations
Implementation

• Mobile interview obs mirrored paper-and-pencil/Blaise interview obs
• Default Blaise IS did not function well on Android smartphone
• Two-server setup to ensure data security
Implementation

• Customized Blaise IS stylesheets with jQuery
  ▪ Radio buttons, check buttons, next/previous buttons
  ▪ Page text clipped when overflowed
  ▪ Pages did not resize well

• C-Moto stylesheets from Tilburg University
  ▪ Unused Blaise features were removed
  ▪ Used jQuery Mobile (javascript) features customized for mobile phone
  ▪ Some features, such as text formatting, added back to Tilburg stylesheet
Stylesheets

(In which room(s) was the **interview** conducted?)

Kitchen mainly, moved around to other rooms

**Custom Blaise IS Stylesheet**

**Modified C-Moto Stylesheet**
Stylesheets

Custom Blaise IS Stylesheet

Modified C-Moto Stylesheet
Stylesheets

For *most* of the CAPI part of the interview, how would you describe your seating arrangement with the R?

- Next to R (facing the same way)
- Next to R (facing at a right angle)
- Across from R
- Some other arrangement

Custom Blaise IS Stylesheet

For *most* of the CAPI part of the interview, how would you describe your seating arrangement with the R?

- Next to R (facing the same way)
- Next to R (facing at a right angle)
- Across from R
- Some other arrangement

Modified C-Moto Stylesheet
Field Test

- Feasibility test
- 3 Weeks (8 April 2013 - 30 April 2013)
- Four interviewers selected to test in field
  - Smartphone skills
    - High
    - Medium
  - Location
    - Different areas of the country
Field Test

• Special training conference call (April 4th)
  ▪ Handling Rs’ concerns about Smartphone
  ▪ Use paper-and-pencil as backup
  ▪ Practice link

• Monitoring
  ▪ Check daily for connectivity issues, R's concerns and verify correct SID
Field Test

• Results
  ▪ 51 interviews completed
    • 43 completed by Smartphone
      ▪ No respondent concerns
    • 8 completed by paper-and-pencil
      ▪ 2 Link issues
      ▪ 6 Connectivity issues – 11.8%
Field Test

- Interviewer Debriefing
  - General comments
    - “Awesome”
    - “It makes me feel like I am saving trees”
    - “Love that it saves me a step and I don’t have to do it when I get home”
  - Common issues
    - Lag time
      - Could not finish mobile obs in the time it took R to complete ACASI
    - Having to reload pages/hit answer multiple times
    - Forgot to write down SID
Field Test

• Interviewer Debriefing (cont.)
  ▪ Unexpected issues
    • One interviewer felt that she might be not be presenting a professional manner using her Smartphone
    • If R asked for help with ACASI after they completed mobile interview obs they could not switch the answer
  ▪ Would they like to see this rolled out to the field?
    • Yes!....If lag time can be fixed
Future Steps

• Resolve connectivity issues
  ▪ Exploring applications that have off-line capabilities
    • Open Data Kit
    • Form Hub
Breaking News ...

- Using Open Data Kit
  - QR image in Blaise to load SID
  - New field test of 4 interviewers
    Oct 1. - Oct 30
  - Fully developed user entry
  - Back end data processing after collection
  - Convert data from ODK into Blaise for standardized data delivery
Thank you!

Jennifer Kelley, jennifke@umich.edu
Peter Sparks, zebulon@umich.edu