

Household Roster Management in a Blaise Instrument

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INTRODUCTION

Data collection instruments are frequently required to collect responses from all selected household members. When a detailed personal part of an interview is lengthy and complicated, a respondent will often suggest completing it some other time. Then the instrument needs to break-off the personal interview with this respondent and go to another selected household member for their personal part of the interview without breaking off the administration of that same case.

This paper addresses the problems and issues of conducting a household interview with multiple respondents per household within one Blaise instrument and presents a solution for household roster management in anticipation of different jumping scenarios from one selected member to another before all personal interviews within a household are completed.

The particular survey instrument under discussion was developed by RTI International for the Bureau of the Census. It was implemented for the 2011 National Survey of Fishing, Hunting, and Wildlife – Associated Recreation Project (FHWAR) designed to provide data on recreation activities in specific geographic areas. The survey gathers information about people's involvement in outdoor activities, where and how often they pursue them, and their related expenditures. This survey will be conducted beginning in April 2011 and collected data will be used by governmental and commercial agencies alike to provide valuable insights regarding trends and economic significance of outdoor recreational activities.

The survey contains the following modules: Front section, Household Screener, Sampling selection, detailed Personal Interviews (instrument allows for up to 25 selected household members) and Back section.

Section purpose and description:

- **Front section:** to determine whether the correct sample address was contacted and to obtain a respondent who is at least 18 years old;
- **Screener:** to collect basic demographic information about all people in the household and their interests in the survey subject;
- **Sampling:** to select household members who participate in activities linked to the survey subject;
- **Personal interview** (for each selected respondent): to collect detailed information about a person's activities linked to the survey subject and to set up personal callback appointments;
- **Back section:** to set up household appointments and collect contact information; finishing by thanking the respondent for the interview.

For the survey described here, each household is rostered. Once the roster is completed, a series of specific follow-up questions are asked about each household member. All household members are sampled based on screener responses. Only sampled household members will be eligible for further detailed personal interviews regarding the survey subject. Therefore, interview data is

stored at a household level and at person levels. The household interview is completed only after personal interviews of all sampled household members receive a status of complete.

To consider the household interview complete, it is necessary to speak to all selected people in a household and complete their personal interviews. It is expected that in many households with multiple respondents the interview won't be completed for all eligible respondents during the same visit or call. Therefore, it is important to ensure that the data collection instrument is programmed to allow break-offs with one respondent and continuation with another respondent in the same household without having to exit and then reenter the same case.

CONSIDERATIONS

There are several essential issues to consider before choosing the most suitable way to program the instrument to allow for this type of interviewing situation. Considerations related to the block structure for handling the interview task include:

- The way the Blaise application re-evaluates the interview path;
- Handling of counters throughout the interviewing process;
- Individual data storage for each sampled household member;
- Required programming constructs on household and personal levels;
- Interview points at which the instrument needs to return when break-off occurs depending on the type of the break-off (household or personal).

The challenge is to break off a personal interview with one household member without breaking off the household interview and to initiate a detailed personal interview with another respondent. The first suggested solution was to create a separate parallel block for each sampled respondent that would allow a field interviewer to choose a correct tab when the instrument is ready to begin detailed personal interviews. These parallel blocks would appear at the appropriate moment of the interview when the Screener and Sampling sections are completed and the interviewer is ready to conduct the detailed personal interviews. As soon as the personal interview of any particular household member is completed, it would not be available for the field interviewer to choose and conduct any more.

This proposed solution was not viable as the survey specification writers wanted to have more control over the flow of the interview. There were also some concerns regarding the interview appearance; for example, the presence of the additional tabs for up to 25 household selected respondents. This number of tabs could be very confusing for a field interviewer, would increase the burden on the interviewer and open the door to potential human error in recording interview results. Therefore, another approach was chosen for the household roster implementation and management of jumps from one respondent to the next. The details of the instrument coding for this alternative solution are described below.

IMPLEMENTATION

Two parallel blocks were implemented to indicate two types of break-offs: one to break off the personal detailed interview and another one to break off the household interview. Each of these parallel blocks has a shortcut key associated with it. In this case, F10 is chosen to break-off a household interview and F9 to break off a personal interview of any sampled household member.

If a field interviewer needs to break off the whole household interview they press F10. The instrument then jumps to the parallel block, `Finish_The_Interview`, to verify the interviewer's intention to prematurely close the household interview. After the confirmation is received, the instrument jumps to the main parallel `Back` section to set up a next household appointment, collect contact information and, of course, to thank the respondent at the end of the interview. The example of the code in the `.bla` file:

```
IF Finish_The_Interview.Confirmation = Yes THEN
  Front_Section.KEEP
  Screener.KEEP
  Sampling.KEEP
  FOR B := 1 TO HH_COUNT DO
    Detailed_Interview[B].KEEP(B)
  ENDDO
ELSE
  Front_Section
  IF Screener.Completed <> Yes THEN
    Screener
    Sampling
  ELSE
    Screener.KEEP
    Sampling.KEEP
  ENDIF
  {proceed with detailed personal interviews}
  ...
ENDIF
Back_Section
```

To choose a respondent for the detailed personal interview, a menu field (`Speak_Menu`) is created (note that all sampled household respondents are listed as response options):

◆ HOUSEHOLD RESPONDENT IS IN SAMPLE. ENTER 1 TO CHOOSE THAT PERSON.

LINE	NAME	SAMPLE
1	John Citizen	Sportsperson
2	Mary Citizen	Sportsperson/Wildlife
3	James Citizen	Sportsperson

1. John Citizen
 2. Mary Citizen
 3. James Citizen

Income **less10k**
 Samp flags **Continue**
 Speak screen
 Change respondent

Each of the selected respondents has a detailed personal interview module (Personal_Interview block) assigned to him/her, according to his/her Roster line number. IF-ELSEIF construction in the main parallel puts only one Personal_Interview block on the route at a time depending on Speak_Menu response:

```

IF RosterLineNumber = RESPONSE AND RosterLineNumber >= 1 AND
  RosterLineNumber <= HH_COUNT AND
  (Screener.Sampling[RosterLineNumber].SampleFlag IN [3,4,5]) AND
  Screener.Roster.Persons[RosterLineNumber].PersonStatus = NotCompleted THEN
  IF RosterLineNumber = 1 THEN
    NEWPAGE Personal_Interview[1](1)
    IF HH_COUNT >= 2 THEN
      FOR B := 2 TO HH_COUNT DO
        Personal_Interview[B].KEEP(B)
      ENDDO
    ENDIF
  ELSEIF RosterLineNumber >= 2 AND
    RosterLineNumber <= HH_COUNT AND HH_COUNT >= 2 THEN
    IF RosterLineNumber = 2 THEN
      NEWPAGE Personal_Interview[2](2)
    ELSEIF RosterLineNumber = 3 THEN
      NEWPAGE Personal_Interview[3](3)
    
```

{Similar code follows here for every respondent of 25 possible household members}

```
ELSEIF RosterLineNumber = 25 THEN
  NEWPAGE Personal_Interview[25](25)
ENDIF
PrevRosterLineNumber := RosterLineNumber - 1
FOR B := 1 TO PrevRosterLineNumber DO
  Personal_Interview[B].KEEP(B)
ENDDO
IF HH_COUNT >= (RosterLineNumber + 1) THEN
  NextRosterLineNumber := RosterLineNumber + 1
  FOR B := NextRosterLineNumber TO HH_COUNT DO
    Personal_Interview[B].KEEP(B)
  ENDDO
ENDIF
ELSE
  FOR B := 1 TO HH_COUNT DO
    Personal_Interview[B].KEEP(B)
  ENDDO
ENDIF
ELSE
  FOR B := 1 TO HH_COUNT DO
    Personal_Interview[B].KEEP(B)
  ENDDO
ENDIF
```

The KEEP statements are included in the IF-ELSEIF construction to avoid losing data when any particular personal interview is off-route as Blaise clears all this data from the database upon closing the form.

As soon as any personal interview is completed, the name of this person is grayed out in the Speak_Menu question text and response options. If a field interviewer chooses this person anyway, an error message comes up to indicate that this person is not eligible for the interview.

• ENTER THE LINE NUMBER OF THE PERSON YOU WISH TO SPEAK WITH:

HOUSEHOLD ROSTER		
LINE	NAME	SAMPLE
1	John Citizen	Sportsperson
2	Mary Citizen	Sportsperson/Wildlife
3	James Citizen	Sportsperson

1. John Citizen
 2. Mary Citizen
 3. James Citizen

Income **less10k**
 Samp flags **Continue**
 Speak screen
 Change respondent

To increase the benefits of this interviewer-administered survey and reduce respondent burden, the interviewer can break-off the detailed personal interview with one respondent and initiate it with another available at the moment sampled person in the household by pressing F9 key. This key is assigned to a parallel block, Finish_Personal_Interview. The only field available in this block confirms the interviewer intention to exit this personal interview and to switch to another sampled respondent. As soon as the confirmation is acknowledged, the instrument jumps back to that same detailed interview to collect a reason for premature exit and schedule an appointment for this particular respondent. This information will be kept on the personal level.

The detailed personal interview includes many sub-blocks. These personal data collection survey blocks are called using parameters. The program example is shown below:

```

IF Finish_Personal_Interview.Confrimention = Yes THEN
  SPEAK1.KEEP
  GetHunt.KEEP(MLineN,MName)
  NumHuntSt.KEEP
  HuntSpeciesNumber.KEEP
  FOR K := 1 TO NumHuntSt DO
    BGSCHAR[K].KEEP(GetHunt.ArrHunt_st.HUNT_STATES[K].ORD,MLineN)
    SMSCHAR[K].KEEP(GetHunt.ArrHunt_st.HUNT_STATES[K].ORD,MLineN)
    MBSCHAR[K].KEEP(GetHunt.ArrHunt_st.HUNT_STATES[K].ORD,MLineN)
  ENDDO

```

```
...
ELSE
    SPEAK1
    GetHunt(MLineN,MName)
...
ENDIF
```

When the last item of the personal detailed interview is answered, the instrument recalculates the personal interview status and blanks the Speak_Menu in case there is a need to interview any other household members. Then the instrument jumps back to Speak_Menu item and allows the interviewer to choose another interview respondent.

In order to determine the household interview status, the instrument maintains not just all sampled personal interviews statuses, but also global counters for all sampled household members who already completed personal interviews as well as those eligible respondents for whom an interview has not yet been completed.

CONCLUSION

A properly implemented design with good programming skills can anticipate and overcome problems in data collection. This scenario of roster management over the course of many household respondents for lengthy interviews makes data collection effectively easier for interviewers conducting in-person or telephone interviews. Many potential problems have been negated by quality design and programming ensuring better success for the survey. Proper functionality for the interviewer is now in place to make their work much easier to conduct:

- Respondents can end their interview and another respondent within the household can be engaged immediately.
- Highly complex data dependencies are maintained for future completion of the interview.
- No data is lost and no questions have to be repeated and asked again of the respondent.
- Appointments can be set for follow-up interviews and restarted at place of exit.
- Appointments can be set for respondents that cannot be contacted during the initial household interview.

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