



turning knowledge into practice

Incorporating Dynamically-Generated Calendars in a Blaise Questionnaire

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Overview

- Background of the project
- Paper and Electronic Calendar
- Our approach
- Demonstration
- Possible future enhancements

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NSDUH Background

- **N**ational **S**urvey on **D**rug **U**se and **H**Health
- Sponsored by the Substance Abuse and Mental Health Services Administration (SAMHSA)
- Primary source of information on the use of illicit drugs, alcohol, and tobacco among the non-institutionalized population age 12 and older in the United States

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-RTI International has conducted **N**ational **S**urvey on **D**rug **U**se and **H**Health study since 1988. It was previously

- called National Household Survey on Drug Abuse (NHSDA).

-The study is sponsored by the Substance Abuse and Mental Health Services Administration (SAMHSA).

-NSDUH is the primary source of information on the use of illicit drugs, alcohol, and tobacco among the non-institutionalized population age 12 and older in the United States

-Approximately 170,000 households are randomly selected and screened and approximately 67,500 interviews completed annually

-Interviews are conducted using Computer Assisted Interviewing written in Blaise program

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Background of NSDUH Calendar

- The NSDUH interview has used reference date calendars since 1994
- The paper calendar was retained after the survey was computerized in 1999
- The calendar assists respondents in reporting 30-day and 12-month use of tobacco, alcohol and drugs
- These dates are referred to as the 30-day reference date and the 12-month reference date

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- Throughout the NSDUH interview, respondents are asked to report whether they have used various substances in the past 30 days, the past 12 months and in their lifetime.
- To assist with this reporting, reference date calendars have been used during the interview since 1994.
- While the survey transitioned to a computerized instrument in 1999, the reference date calendar remained in a hard copy format.
- The calendar is intended to assist respondents who are reporting whether they used tobacco, alcohol and drugs in the past 30 days or in the past 12 months.
- The beginning dates of these reference periods are referred to as the 30 day reference date and the 12 month reference date.

Use of the Reference Date Calendar

- write both the 30-day and 12-month reference dates on the paper calendar
- The last 30 days are underlined and the 12-month reference date is circled
- However, not all respondents turn their attention away from the computer to consult the paper calendar

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- Currently, the interviewer sets up the calendar by writing both reference dates on the paper calendar.
- Each of the last 30 days is underlined and the 12 month reference date is circled.
- Respondents are instructed to refer to the calendar as questions in the ACASI section of the interview inquire about the past 30 days and the past 12 months.
- The interviewer tells the respondent that she can look at the calendar to help her remember when different things happened. Using the calendar involves turning away from the computer and reading a separate sheet of paper, which not all respondents actually do.

Example of Completed Paper Calendar

Case ID: _____

REFERENCE DATE CALENDAR						
JANUARY 2007 S M T W T F S 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31		FEBRUARY 2007 S M T W T F S 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28		MARCH 2007 S M T W T F S 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31		
APRIL 2007 S M T W T F S 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30		MAY 2007 S M T W T F S 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31		JUNE 2007 S M T W T F S 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30		
JULY 2007 S M T W T F S 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31		AUGUST 2007 S M T W T F S 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31		SEPTEMBER 2007 S M T W T F S 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30		
OCTOBER 2007 S M T W T F S 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31		NOVEMBER 2007 S M T W T F S 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30		DECEMBER 2007 S M T W T F S 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31		
30-DAY REFERENCE DATE: <u>April 19, 2008</u>						
12-MONTH REFERENCE DATE: <u>May 19, 2007</u>						
JANUARY 2008 S M T W T F S 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31		FEBRUARY 2008 S M T W T F S 3 4 5 6 7 1 2 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29		MARCH 2008 S M T W T F S 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31		
APRIL 2008 S M T W T F S 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30		MAY 2008 S M T W T F S 4 5 6 7 1 2 3 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31		JUNE 2008 S M T W T F S 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30		
JULY 2008 S M T W T F S 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31		AUGUST 2008 S M T W T F S 3 4 5 6 7 1 2 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30		SEPTEMBER 2008 S M T W T F S 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30		
OCTOBER 2008 S M T W T F S 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31		NOVEMBER 2008 S M T W T F S 2 3 4 5 6 7 1 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30		DECEMBER 2008 S M T W T F S 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31		

Purpose of the Reference Date Calendar

- Providing the visual representation of the calendar along with the specific dates of interest allows for the respondent to anchor his recall
- Anchoring prevents telescoping in the retrospective reports of autobiographical behavior and leads to more accurate reports (Belli et al 2001)

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- Providing the calendar assists the respondent with his recall efforts.
- Research has shown that tools such as reference date calendars have increased the accuracy of reports of past behavior, such as drug use.
- Therefore, it is important to maximize respondents' use of the calendar.
- Providing an on-screen electronic calendar may help achieve this goal

Development of Electronic Calendar

- Blaise alien router calls a Visual Basic DLL
- Blaise menu command for executing the same VB program
- Visual Basic program uses a set of grid controls, one grid per month
- Possible to display a variable number of months

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-We use Blaise alien router to call a Visual Basic DLL which in turn calls a VB program that generates a calendar based on current date and other data values

-We also use Blaise menu command for executing the same VB program whenever we want to.

-Visual Basic program uses a set of grid controls, one grid per month, and fills in the dates and highlights dates of importance.

-Therefore we could display different number of months depending on the question and other data.

Reasons for Using this Approach

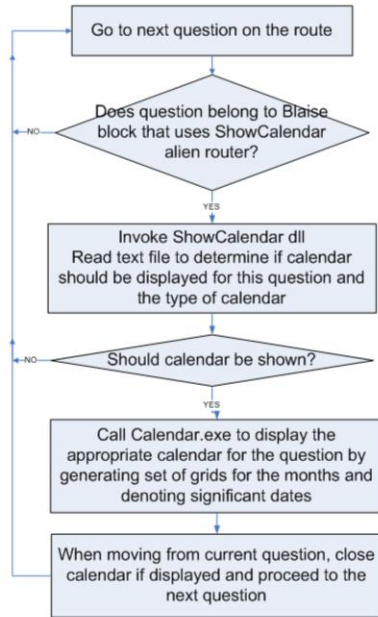
- Broad assortment of capabilities and controls can be utilized to perform tasks that would be difficult, if not impossible, to do in Blaise alone
- Calendar application can be modified independently of instrument with a minimum of difficulty
- Provides flexibility

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-Visual Basic has capabilities and controls that can be used to replicate paper calendar. It would be very difficult, if not possible, to do this in Blaise alone.

-Calendar application can be modified independently of instrument with a minimum of difficulty.

-Provides flexibility to specify which calendar is displayed for which questions by means of an input file.



At any time within Blaise instrument if "Show 12 Month Calendar" menu command is selected, then showcalendar.dll is invoked which will call calendar.exe to display the appropriate calendar

Demonstration

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Possible Future Enhancements

- Add event handling routines for when a date is clicked on, such as confirmation of date of a significant event
- Read and write calendar data either to Blaise data file or other type of database
- Use calendar as an input tool for responding to questions

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Reference

Belli RF, Shay WL, Stafford FP. Event history calendars and question list surveys: a direct comparison of interviewing methods.
Public Opin Q. 2001; 65:45–74.

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