SECOND NATIONAL SURVEY ON CHILDREN'S EXPOSURE TO VIOLENCE (NatSCEV II)

Methods Report

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INTRODUCTION TO THE SURVEY

Under a grant from the Department of Justice, the University of New Hampshire (UNH) conducted two national computer-assisted telephone (CATI) surveys on child safety and victimization in the United States. These surveys, named the National Survey on Children's Exposure to Violence I, conducted in 2008 and the National Survey on Children's Exposure to Violence II conducted in 2011, or NATSCEV I and II, interviewed households across the United States to find out about stressful events that happen to some children, and how schools and various agencies may better protect children from dangerous situations.

For NatSCEV II, a nationwide sample which excluded any phone numbers with area codes assigned within the state of New Hampshire was constructed using four frames: (1) 801,317 landline telephone numbers from which telephone households could be drawn by random digit dialing (RDD); (2) 5,000 cell-phone telephone numbers from which a sample of cell phone users could be drawn by RDD; (3) an address-based sample (ABS) of 70,924 cell phone and residential numbers; and (4) a pre-screened sample of 3,573 telephone numbers of households with children from a recent national RDD survey. The compiled frame yielded 3,259 residential RDD interviews, 31 cell phone RDD interviews,[1] 750 ABS interviews, and 463 pre-screened sample interviews.

The survey was administered in English or Spanish and took an average of 56 minutes to complete. It included questions about things that may have happened in a child's school, neighborhood, or home, and questions about the child's health. Some questions were sensitive such as those which asked about the child's experience with violence and unwanted sexual advances. In households with more than one child aged 0-17, the eligible child was randomly selected by the CATI program. Otherwise the only child was automatically designated as the eligible child. If the eligible child was 9 years old or younger, the adult parent or guardian completed the entire interview on behalf of the child. If the child was 10 years old or older, a short interview was conducted with the parent or guardian then permission was requested to conduct the remainder of the interview with the 10-17 year old. A total of 4,503 interviews were conducted: 2,191 with adult parents or guardians of children age 0-9 and 2,312 with adult parents or guardians of adolescents age 10-17. If permission was granted to interview the 10-17 year old but the child was not available at the time of the adult interview, a callback was scheduled. When permission was refused, the child was not re-contacted.

Because RDD was used to contact the majority of respondents, it was impossible to send an advance letter. However, a letter about the project was sent by UNH to any parent, guardian, or child who wanted more information about the study before they participated. This letter explained the purpose of the study, assured confidentiality, emphasized the voluntary nature of participation, and otherwise conformed to standards for the protection of human subjects. The interview was completely confidential. Name and address information was collected to send a $10 to $50 check as a token of appreciation for completing the survey and not used for any other purpose. Check values were determined by the completion of the adult portion of the interview, the child portion of the interview, and the NIJ add-on that was administered to 470 respondents eligible for these questions (196 parents or guardians responding on behalf of a child under 10 years old and 274 interviewed youth). Parents and guardians who completed the first portion of the interview were eligible to receive $10. Parents and guardians who completed both the parent portion and the child portion for a 0-9 year old received an additional $20. Adolescents 10-17 years old received $20 for completing their portion of the interview. Respondents who completed the NIJ add-on questions were eligible to receive an additional $20.

The interviewing functions of the Abt SRBI organization are supported by a sampling staff, a production staff, a coding staff, and a data processing staff, as well as a design and analysis staff. Virtually all major phases of the research process are conducted in-house at Abt SRBI. This assures strict accountability, quality control, fast turnaround and competitive pricing. The quality and experience of

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[1] The cell-phone RDD sample frame was an experimental design that was discontinued due to low production rate and low interview yield. The ABS sample frame, which proved to have a more favorable production rate and yield, provided the desired contacts with cell-phone users.

the Abt SRBI research and operations staff have been tested in many difficult and important surveys for public and private clients. With its trained interviewing staff, professional supervisory staff, and skilled support staff, Abt SRBI consistently exceeds industry standards for quality research.

SAMPLING PROCEDURES

Overview of Current Telephone Survey Challenges

For decades and until the early 1990's random digit dial (RDD) landline telephone sampling provided a cost-efficient strategy for conducting surveys of the U.S. household population. However, the reliability and validity of random digit dial (RDD) landline telephone surveying in the U.S. has been threatened in the past 20 years by concerns about possible nonresponse and noncoverage bias (AAPOR, 2010). As a result of fundamental changes in the telephone network infrastructure, the landline telephone sampling frame may no longer hold some of the fundamental properties upon which RDD sampling methodology was developed. In particular, the digital transition of the telephone network infrastructure has undermined the relevance of the 100-series telephone number banks for construction of RDD sampling frames (Fahimi et al., 2009). Another significant change is the increase in alternative dial-tone providers that have much lower listed rates for households. Local telephone exchanges are no longer servo-mechanical, meaning that they no longer serve as physical building blocks for telephone number assignment. Additionally, the increase in the number of prefix-level assignments of landline phone numbers for mixed use applications and the steady increase in the number of households with multiple lines makes it more difficult to detect residential line or to separate noncontact from nonworking dispositions in RDD samples. Moreover, these complications continue to multiply as more households come to rely on mobile and Voice over Internet Protocol (VoIP) in addition to or instead of landline phones for voice communications (Fahimi et al., 2009).

According to estimates derived from the most recent National Center for Health Statistics (NCHS) National Health Interview Survey conducted between July and December 2011, 38.1% of children live in households with wireless service only and this percent is steadily increasing (Blumberg and Luke, 2012:1). Adults living in wireless only households are more likely to be Hispanic, live in poverty, and rent vs. own. Within wireless-only households, the proportion of women, adults aged 35 and older, unemployed adults, and adults living with children is also increasing. The astonishing 124% increase in the percentage of children in cell phone only households from 17% in the first 6 months of 2008 (Blumberg and Luke, 2008:1) to 38.1% during the last 6 months of 2011 and data collection for NatSCEV II. The growing threat of noncoverage bias due to the increasing proportion of wireless only households is further exacerbated by the increase in "wireless mostly" households that are either very difficult or impossible to reach on their landlines because they rely on wireless telephones for most or all of their calls. Here, we see a 21.5% the increase in the number of wireless-only adults living with children from 18.1% in the first 6 months in 2008 to 22.8% in the first 6 months of 2011 (Blumberg and Luke, 2011).

Methods for Addressing Telephone Survey Challenges

In response to the formidable challenge of conducting telephone surveys in this rapidly changing environment, survey researchers have spent the past 10 years exploring alternative sampling frames including cell phone (vs. landline) RDD frames, address-based sampling (ABS), dual and other multiple frame designs, and hybrid models that combine probability and convenience frames. In 2007, the same year that NatSCEV I began data collection, a Cell Phone Task Force was established by the Executive Council of the American Association for Public Opinion Research (AAPOR) to prepare a report that would guide the planning and implementation of telephone surveys with respondents reached via cell phone. At the time, much of the emerging research was focused on testing the viability of multiple frame designs.

In 2010-2011 when the sampling design for NatSCEV II was being finalized, the predominant best practice recommendation for telephone surveys was multiple frame design. Since that time, the survey research community has conducted numerous additional studies, advancing the state of knowledge in this field considerably (AAPOR, 2010). Whereas address-based sampling (ABS) has emerged a viable and cost-efficient alternative to the more complex multiple frame designs for telephone surveys,

multiple frame designs can improve coverage by combining incomplete frames to facilitate the sampling of subgroups and rare or hard-to-reach populations and thereby improve the accuracy of estimates for these groups without increasing data collection costs (Kalton and Anderson, 1986). NISMART-2 (Finkelhor et al., 2008) provides a good example of how samples were drawn from multiple frames (RDD, juvenile facilities, and law enforcement) and used to create a unified, national estimate of sexually assaulted children.

NatSCEV II Sample Construction

For NatSCEV II, a nationwide sample which excluded any phone numbers with area codes assigned within the state of New Hampshire was constructed using four frames: (1) 801,317 landline telephone numbers from which telephone households could be drawn by random digit dialing (RDD); (2) 5,000 cell-phone telephone numbers from which a sample of cell phone users could be drawn by RDD; (3) an address-based sample (ABS) of 70,924 cell phone and residential numbers; and (4) a pre-screened sample of 3,573 telephone numbers of households with children from a recent national RDD survey. The compiled frame yielded 3,259 residential RDD interviews, 31 cell phone RDD interviews,[2] 750 ABS interviews, and 463 pre-screened sample interviews.

Landline RDD Sampling Procedures

The sample for the landline phone survey was obtained from Survey Sampling Inc. and selected with a three-stage procedure. In the first stage, a national sample of household landline phone numbers was created with sample allocation proportionate to the population distribution. In the second stage, a sample of assigned telephone banks was randomly selected from an enumeration of the Working Residential Hundred Blocks within the active telephone exchanges within each targeted community. The Working Hundreds Blocks are defined as each block of 100 potential telephone numbers within an exchange that includes one or more residential listings. A two-digit number was then randomly generated by computer for each Working Residential Hundreds Block selected in the second stage sample. In this sampling technique, known as third stage RDD, every telephone number within the Hundreds Block has an equal probability of selection regardless of whether it is listed or unlisted.

Screening for Eligibility – Landline Sample

A national probability sample of telephone households excluding the state of New Hampshire was created with random digit dialing to obtain residential contact in the landline sample numbers. Telephone numbers yielding non-residential contacts such as businesses, churches, and college dormitories, were not included as working phone numbers. Only households with children 17 years of age or younger currently living in the home were eligible for inclusion in the sample. If the household did not include children or if there were no adult members of the household (18 years of age or older), the interview was terminated and the contact was counted as a screen-out. Once an eligible household was identified, the interviewer asked to speak with a parent or guardian living in the household who was familiar with the everyday activities of the child or children living in the household. Then, a designated child was selected from all children in the household. For households with more than one child, the focal child was randomly selected with the most recent birthday selection method. If the designated child was aged 0-9, the entire interview was conducted with the parent or guardian. If the designated child was aged 10-17, a short interview was first conducted with the parent or guardian and the child portion of the interview was conducted with the child only after receiving consent from both the parent or guardian and the designated 10-17 year old child.

On November 17, 2011, towards the end of data collection, the eligibility criterion for the survey was changed from households with children 0-17 years old to households with only 10-17 year olds. This

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2 The cell-phone RDD sample frame was an experimental design that was discontinued due to low production rate and low interview yield. The ABS sample frame, which proved to have a more favorable production rate and yield, provided the desired contacts with cell-phone users.

change was designed to compensate for the disproportionate number of completed interviews with households where a younger child was selected as the designated respondent prior to that date. On the day that this change in eligibility took effect, 70% of the 3,260 landline RDD interviews had been completed. The questions used to screen landline RDD respondents can be found in Appendix 1, questions CON2 – CON9. The specific change used to revise the age of eligible children is reflected in the addition of question CON6a used to screen out households with children under age 10.

Cell Phone RDD Sampling Procedures

The sampling frame for the cell phone survey was provided by Survey Sampling Inc. Unlike the landline sample, the only geographic information available for each record in the cell phone sample corresponds to the county of the billing office for the cell phone, not the county or zip code where the respondent resides. Moreover, the exchange assigned to the cell phone represents where the cell phone was purchased, not the current residence of the cell phone user. In order to test the feasibility of using an RDD design with a cell phone frame for NATSCEV II, Abt SRBI sampling staff drew a small national sample of cellular telephone numbers excluding exchanges originating in the state of New Hampshire.

Screening for Eligibility – Cell Phone Sample

Cell phone respondents were asked a series of questions to determine whether they were in a safe place to conduct the interview prior to being screened for eligibility. We first verified that the cell phone respondent was an adult 18 years old or older and then determined whether there were any children 17 years or younger currently living in the respondent's household. If the respondent was not a parent or guardian of a child 17 years or younger, the interview was terminated and the contact was counted as a screen-out. The focal child most recent birthday selection technique used to select the focal child for the landline sample screening of households with more than one child under age 18 was also used for the cell phone sample. On November 17, 2011, when the eligibility criterion for the survey was changed from households with children 0-17 years old to households with only 10-17 year olds, 96% of the 31 cell phone RDD interviews had been completed.

ABS Sampling Procedures

The ABS sampling frame was constructed with a national sample of addresses from the Postal Delivery Sequence File (DSF). These addresses were mailed a one page (two-sided) questionnaire related to child health and safety, approved by the UNH IRB. The questionnaire included questions on household telephone status and children in the household, and requested the respondent's telephone number for a follow-up telephone interview. The final ABS sample was drawn from the pool of returned questionnaires that represented households with children 17 years old and younger. These households were then re-contacted by interviewers and asked to participate in the survey. Some of these households provided a landline phone number and some provided a cell phone number. Landline phone numbers followed the protocol described in the landline RDD sample section and cell phone numbers followed the protocol described in the cell phone sample section. See the previous sections on screening for eligibility for landline or cell-phone RDD samples, with the exception of selection of a designated child after November, 2011. All ABS households in the phone sample followed the cell-phone eligibility screening criteria and selection of a designated child for the interview, as explained in that section. That is, all households with children between the ages of 0 and 17 years were eligible to participate in the survey, but an adolescent child was selected a priori, if the household included an adolescent.

Listed Sampling Procedures

The pre-screened sample consisted of 3,573 households previously screened for the presence of children in three national RDD surveys. In the pre-screened frame, households with children were oversampled at a rate of nine-to-one over households without children. Although the screening and focal child selection procedures were identical to those used for the landline, ABS, and cell phone frames prior to November 17, 2011, in contrast to the other three frames where younger children were no longer eligible on or after November 17, all households with 0-17 year old children remained eligible for the survey in the pre-screened frame, and the change affected only the selection of the focal child. Specifically, in households with younger and older children, only the older children were eligible for selection. On the date that this change in eligibility took effect, 82% of the final 462 pre-screened sample interviews had been completed.

QUESTIONNAIRE DESIGN, PRETESTING AND PROGRAMMING

Questionnaire Design

The UNH research team developed the interview questionnaire and Abt SRBI assisted with the fine-tuning. The survey was administered using computer-assisted telephone interviewing (CATI). The benefits associated with CATI compared to traditional telephone interviewing including automated branching to the next appropriate question, and reduced recording error where acceptable response ranges are programmed to check data entry program. Other quality control benefits of CATI include automatic recording of the day and time of dialing; the number dialed; and the connect time in minutes. Since each CATI interviewer signs on and off the system, this means that the performance of each interviewer on the project, as well as the progress of the study overall is monitored in real time.

CATI Programming of the Questionnaire

Abt SRBI programmed the questionnaire for CATI administration. The CATI program included the following features:

- sample entry and updating procedures
- question and response series
- skip patterns
- section and question rotation
- interviewer probes and instructions
- range checks
- consistency checks
- special edit procedures

The program was reviewed by Abt SRBI's project manager for consistency of question wording, response categories, interviewer instructions and skip patterns with the UNH approved hard copy. The final screener is provided in Appendix 1.

INTERVIEWER SELECTION, TRAINING AND MONITORING

All aspects of interviewer recruitment, training, scheduling, and supervision for NatSCEV II were directed by our Telephone Research Center (TRC) administrative staff according to the specifications provided by the Project Director and analytic staff. The TRC administrative staff maintained detailed records throughout data collection so that survey progress could be monitored by the Project Director and documented for UNH. After finalization of the instrument, questionnaires were printed in sufficient quantities for the interviewer training session held on March 17, 2011, and data collection commenced immediately after the training.

Abt SRBI Interviewers

All interviewers who work for Abt SRBI are thoroughly trained and closely supervised to ensure quality control. This process begins with the comprehensive screening of all new interviewers that includes a reference check and test of their interviewing abilities before they are hired. New interviewers receive extensive instruction in Abt SRBI interviewing methods, policies, and procedures prior to performing their first interview. They are closely monitored during their first two weeks of employment, and subsequent to this probationary period, all of Abt SRBI's interviewers are monitored twice per shift. Abt SRBI telephone interviewers are trained to repeat survey items flawlessly and with an enthusiasm that engages the respondent and makes even the most repetitive tasks interesting. Abt SRBI's permanent call center locations, our reputation as a constant employer, as well as the provision of flexible shift schedules has solidified our position as a prime resource for gifted telephone interviewers.

NatSCEV II required special capability to conduct surveys on sensitive topics. This capability is one of the hallmarks of Abt SRBI. Because of the sensitive nature of this study and its focus on child victimization, only experienced female interviewers who had successfully demonstrated their ability to ask sensitive questions in previous surveys conducted by Abt SRBI were assigned to this project. We know that the quality of a survey's interviewing staff is one of the most important factors affecting the validity, reliability and timeliness of the data collected. Hence, we take special care to identify and select the most appropriate interviewing staff for each of our surveys.

Training Session

At the beginning of the study, all assigned field staff participated in a project training session. Training was divided into two segments. The first phase of training provided a review of the general principles of survey research and interviewing. The second phase dealt specifically with the requirements of the study at hand. Operationally, both sets of information were covered simultaneously in training sessions. In these sessions the specific requirements of the study to be performed were used to breathe life into and demonstrate the general principles of survey research. All interviewers followed a study-specific manual on interviewing procedures developed by Abt SRBI operations staff. The areas which were considered important included a general background training of interviewers and study-specific procedures, covering:

- an understanding of sampling procedures and the importance of rigorous adherence to sampling procedures in the field;
- an understanding of respondent selection procedures and the importance of following these procedures rigorously;
- the role of the interviewer in the survey process;
- recommended methods for contacting potential respondents and procedures for setting appointments;
- effective methods for gaining initial agreement to be interviewed;

- methods for overcoming initial reluctance to schedule or agree to be interviewed;
- interviewer behavior in the interview setting -- how to be courteous, neutral and nonintrusive;
- how to avoid biasing responses by verbal and nonverbal cues;
- how to ask and record close-ended questions;
- how to probe and record open-ended questions;
- how to control irrelevancies and digressions without offending the respondent;
- how to reassure respondents about the confidentiality of the information collected and the anonymity of survey respondents;
- the general standards of completion, comprehensibility and legibility required for recording;
- general recording conventions; and
- field reporting standards.

Additional training materials included item-by-item interviewing specifications; procedures to maximize the probability of obtaining sensitive information from respondents; proper CATI recording procedures; and additional reporting and quality control requirements for this effort.

The training sessions reviewed general interview principles and unique study procedures and requirements. They also provided hands-on practice using CATI by conducting mock interviews. For NatSCEV II, the most critical training issue was ensuring that questions were asked properly and responses were recorded accurately. Consequently, much of the training period was devoted to question-by-question specifications for the interview. The remaining time was spent in reviews of initial contact and screening procedures, call-back protocol, sample record-keeping and other administrative matters. After the first formal training session, individual instruction was provided as needed based on each interviewer's closely monitored performance.

Supervision and Monitoring of Telephone Interviewers

We monitored a randomly selected 10% of each interviewer's work unless there was reason to believe a problem existed. Then, very intense monitoring was implemented until the problem was resolved. Because interviewers are never aware if or when they are being monitored, their performance is neither positively nor adversely affected by the monitoring. Abt SRBI draws upon a staff of experienced telephone supervisors for its projects. All supervisors participate in the project training session in addition to receiving a separate review on interview editing instructions, refusal prevention and conversion, and other study specific issues. Two types of supervisors work on Abt SRBI telephone surveys: shift supervisors and monitors. The shift supervisor who is on duty during each of the five weekly shifts is responsible for quality control, maintaining production rates and supervising the monitors. In addition, Abt SRBI normally uses one line monitor for every 10 to 12 interviewers. The line monitor silently monitors each interviewer at least twice per interviewing shift to evaluate the interviewer's performance. The monitor discusses any problems an interviewer is having with the shift supervisor. Then prior to the end of the interview shift, the monitor and/or shift supervisor discuss the problem with the interviewer and provide additional instruction and coaching as needed. If the problem does not resolve, the interviewer is dropped.

CONDUCT OF INTERVIEWS

The primary task of this survey was to design and implement a uniform and systematic data collection effort with a representative national sample of households with children. To this end, Abt SRBI assembled a management, operations and interviewing staff with an extremely broad background in survey research. The management, operations, and interviewing staff were supported by one of the most exceptional analytic teams in the country, enabling us to provide high quality data collection services in a cost-efficient manner. Three steps were used to reduce interviewer variability. First, a highly structured interview format with very explicit interviewer instructions was developed. Second, interviewers were instructed that they were only permitted to read the questionnaire script and that they were not permitted to say anything else. Indeed, word emphasis was indicated by underlining, and the number and manner of probes was indicated on the questionnaire. Finally, only interviewers who could read a script in an intelligent and interesting manner, time after time, without shifting intonation or inflection, were assigned to the project. In short, we created a very tight script, used experienced professional interviewers to read the script and showed them exactly how it was to be done. Figure 1 depicts the frequency distribution of the 80,483 NatSCEV II call attempts made over the entire field period beginning when data collection started on March 17, 2011 and ending when the field period closed on January 24, 2012.

Figure 1. Frequency Distribution of the NatSCEV II Call Attempts
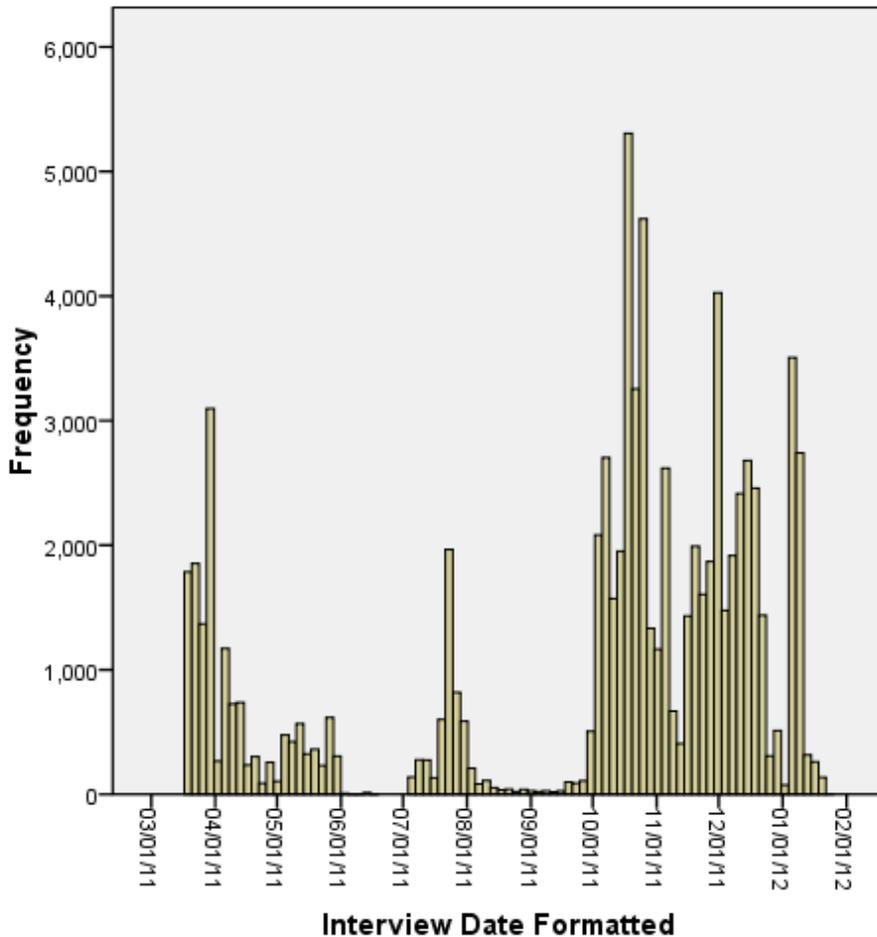
The 2011 NatSCEV II telephone survey was conducted at the firm's Telephone Research Center (TRC) facilities in New York, NY, Hadley, MA and Huntington, WV. The Abt SRBI TRCs are fully monitored telephone facilities with central line switching. All interviewing positions in the telephone centers used for this study were equipped for computer-assisted telephone interviewing (CATI) administration of the survey and manned by a corps of over 250 highly skilled executive and household interviewers with substantial prior experience on sensitive topic surveys. The interviewers were overseen by an experienced staff of telephone supervisors and monitors.

Sample Assignment

The telephone numbers sampled for the NATSCEV II Survey interviews were automatically assigned to interviewers by the CATI system. Once interviewers advance past the message screen, and indicate if they want to conduct an interview or locate a callback for a named respondent, the system provides the phone number and its current disposition (e.g. First Attempt) prior to advancing to the opening screen which provides information on the sampled case. If the day and time correspond with the "best days to call" and "best times to call" listed for the respondent or no preference is indicated, interviewers dial the number for the primary respondent. If it is not an appropriate day or time to call, interviewers advance to the next case.

Initial Contact

The initial telephone contact was attempted during the hours of the day and days of the week with the greatest probability of respondent contact: between 5:30 p.m. and 10:00 p.m. on weekdays; between 9:00 a.m. and 10:00 p.m. on Saturdays; and between 10:00 a.m. and 10:00 p.m. on Sundays. Interviewers attempted a minimum of five calls to each telephone number. When the household was reached, the interviewer asked to speak to an adult age 18 years or older. If an adult was reached, but the interview could not be conducted at the time of contact, the interviewer probed for appropriate callback times and attempted to set up an appointment at a time convenient for the respondent. Although interviews were primarily conducted on evenings and weekends, daytime interviews were scheduled as needed. If four telephone contacts on the night and weekend shifts did not elicit a respondent contact, the fifth contact was attempted on a weekday. The Abt SRBI TRCs are fully staffed during the five daytime and five nighttime shifts on weekdays, and the four weekend shifts enabling us to reach respondents at any time convenient to them.

The CATI sample management system accurately records the entire contact attempt history for each case. These records include the date and time of every attempt and contact; the outcome of each contact attempt; and the date the interview was actually conducted or the reason it was not. These outcomes include answering machines, language barriers (and the language, if identifiable), as well as other survey outcomes. This detailed information helps the study team identify and understand any problems that may arise in fielding the sample. Because the CATI system assigns cases to each interviewer on a random basis each shift, many interviewers may work on a single case at different times. When an interviewer completes an interview, or encounters a refusal, termination, some form of survey ineligibility, or any other outcome, this information is captured by the CATI system. The CATI system removes all completed interviews and "dead" cases from the active cases and sends them to the sampling department for appropriate action. At the end of each shift, a CATI management record is printed out and reviewed by the shift supervisors. Completed interviews are logged into the daily record and sent to the coding department for post-field editing. Refusals or terminations are reported to the field manager with the reason for refusal, and held aside for conversion efforts at the appropriate time.

No Answer and Busy Outcomes

In order to obtain the highest possible response rate, interviewers made five attempts to ring unanswered telephones on different days and at different times over a period of at least three weeks. Numbers where busy signals were encountered were re-dialed 15 minutes after the initial contact attempt. Cases were classified as final "No answer" only after five or more unsuccessful attempts. If the telephone contact produced a "number has been changed" recording, interviewers entered the new telephone number into the CATI system. If the interviewer was told the number dialed was "No longer in service" or "Disconnected", these outcomes were recorded.

Procedures Used to Avoid and Convert Refusals

When a refusal occurred, interviewers asked the respondent to provide the reason for the refusal and if a response was given, it was recorded in the CATI system. Each interviewer was instructed to keep an extremely accurate record of each refusal. They documented the reason for refusal, if given; the exact point of refusal; whether the refusal was given by a woman or a man; and any other comments that helped to clarify the reason for non-interview such as the circumstances surrounding the refusal, and any problems with the contact script, questionnaire or interviewing procedures they believed contributed to non-participation. This information was systematically reviewed by the research team and used to assign cases into hard or soft refusal categories and to determine if the case was eligible for a refusal conversion attempt. Both the Project Director and the Operations Manager analyzed the data on refusal rates, refusal distributions and related information on an ongoing basis.

Procedures Used to Maximize Response Rates

In order to attain the highest possible response rate, the interviewing strategy used the following major components:

- Careful development and refinement of the initial contact script. Most refusals occur within the first minute of contact. Because the first two or three sentences of the survey, the introduction may have a dramatic effect on response rate. Special attention was paid to:

  a) Explaining the social utility of the survey;

  b) Explaining why we need the information and how it will be used;

  c) Assuring potential respondents that they would not have to answer any questions that they do not want to answer.

- Assignment of all cases to a group of thoroughly trained and experienced interviewers who were highly motivated and closely supervised.

- Special training for all interviewers on how to overcome initial reluctance, disinterest or hostility during the contact phase of the interview.

- A sufficiently long field period to facilitate the eventual interview of respondents who were difficult to reach as well as time to convert active refusals and terminations.

- A five-call (initial attempt) contact strategy, conducted according to an algorithm designed for maximum probability of contact.

- The maintenance and regular review of field outcome data in a sample reporting file derived from both the sample management and CATI files, so that patterns and problems in both response and production rates could be detected and analyzed.

- Weekly meetings of the interviewing and field supervisory staff with the study management staff to discuss problems with contact and interviewing procedures and to share methods of successful persuasion and conversion.

SURVEY OUTCOMES

A total of 4,503 interviews were completed with 2,192 with parents or guardians of 0-9 year old children and with 2,312 parents or guardians and 10-17 year olds. The average interview length was 56 minutes. The distribution of the number of call attempts per telephone number ranged from a single call (652 cases, or 14.5% of the sample) to 51 calls. Whereas the average number of call attempts per telephone number was 3, it took an average of 6.2 call attempts for each completed interview.

Occasionally interviews were broken off in the middle. Break offs are classified as a type of refusal in which the respondent answers some of the interview questions, but then decides not to finish the interview. Refusals also occurred prior to answering even the first survey question. Sometimes an unexpected interruption resulted in a callback that did not produce a completed interview, and some calls were cut off. When any of these things happened during an interview, interviewers entered "H" to bring up the HALT MENU. If the respondent had terminated the interview, "T" was entered, indicating a terminated interview. If the respondent could not finish at that time and wanted a callback later, "callback requested" was recorded on the sample card with the date and time preferred. If the call was accidentally cut off, interviewers called back the respondent immediately. If they were reached, the interview was resumed at the last question. The CATI system saved interviews that were broken off so that a callback to complete or termination conversion could be made.

Type of Phone User

Respondents were contacted on landline and cell phones. Adult respondents were asked a series of questions to determine whether the household used one or more landline telephones, one or more cell phones or both and to what extent they used each device. Based on this information, respondents were coded into one of three phone user categories: cell phone only, cell phone mostly, or other, where the other category includes any landline-only households, dual-users who did not use their cell phones most of the time, and respondents who did not know or refused to disclose this information. Table 1 provides the weighted and unweighted distributions for the type of phone user. Notably, the contacted sample underrepresents cell phone only households with children, and this underrepresentation has been corrected with post-stratification weights using the 2010 American Community Survey Public Use Microdata Sample File (ACS PUMS).

Table 1. Completed Interviews by Type of Phone User

All Frames	Unweighted		Weighted	
	N	Percent	N	Percent
Cell phone only	339	7.5	1433	31.8
Cell phone mostly	1102	24.5	1013	22.5
Other	3062	68.0	2057	45.7
Total	4503	100.0	4503	100.0

DATA PREPARATION AND PROCESSING

Data Cleaning

The real success of any survey is ultimately dependent on how accurately the information provided by respondents is captured during the interview and translated into a computer readable dataset. At each stage of the data collection, editing, coding and processing effort, there is potential for non-sampling error. Even the best questionnaire and most sensitive interviewing can be rendered meaningless by anything less than meticulous handling of the data during the editing and coding process. This explains why Abt SRBI takes great pains to minimize data processing error by designing the data recording and processing procedures as carefully as the sample design and data collection procedures.

Although CATI administration effectively reduces key-entry errors and immediately translates the data into computer readable form, Abt SRBI scrutinizes the data at several points in the research process as part of its quality assurance protocol. When errors were detected during the editing process, they were resolved by visual inspection of the total CATI record for the case and any verbatim responses on paper. Corrections to the data were made on-line so that any alteration of the database that generated an inconsistency with extant data or was out of range was identified immediately. Re-evaluation of the just-initialed change ensued and the database was corrected as appropriate. Before being pronounced as final, the entire database was again subjected to a comprehensive machine edit.

Income Imputation

Even among participating households, systematic differences in item nonresponse can result in biased estimates. Item nonresponse to the income questions was addressed with imputation. In NatSCEV II, detailed information about a household's income was obtained with the multi-part question PI28. The opening part asks about a rough categorization (<$20K; $20-50K, $50K+), and then follow-up questions break income into four categories in the lower range ($0-$5K, $5K-$10K, $10K-$15K, and $15K-$20K), three categories in the middle range ($20K-$30K, $30K-$40K, and $40-$50K), and three categories in the upper range ($50K-$75K, $75K-$100K, and $100K+). The unweighted counts and percentages in these groupings are provided in Table 2.

To impute the roughly categorized income, an ordered logistic regression was fit to the original rough income data for the item respondents, and predictions were used to impute the missing incomes once using the following explanatory variables:

- Education (PI21, as continuous variable, with the DK and REF categories omitted)
- Employment status (PI20, as categorical variable)
- Aid recipient status (recoded PI29: 1 for received any aid, 0 otherwise)
- Number of adults in the HH (PI10)

Using the coefficients of the model, the probabilities of the three response categories were obtained for the subsample with missing/refused rough income responses, and the category with the highest probability was chosen as the imputed one. After this imputation procedure, there were still 2 missing values in 2011 data. These were imputed using the overall modal value (above $50K). Imputation of the detailed income was not undertaken.

Table 2. Unweighted Income Counts and Percentages Based on PI28

	Original rough	Original detail	Imputed rough
0-$20K, of which:	699 (15.5%)		735 (16.3%)
0-$5K		143	
$5K-$10K		128	
$10K-$15K		159	
$15K-$20K		235	
Refused detail		34	
$20K-$50K, of which:	111 (24.8%)		1175 (26.1%)
$20K-$30K		382	
$30K-$40K		353	
$40K-$50K		357	
Refused detail		23	
$50K+, of which:	2451 (54.4%)		2593 (57.6%)
$50K-$75K		699	
$75K-$100K		657	
$100K+		1050	
Refused detail		45	
Refused any	238 (5.3%)		

Sample Weighting

(a) Baseline Weights

The baseline weights for NatSCEV II survey have been obtained from three components. The first component is the frame probability of selection, defined as the inverse probability of selection of the sampled phone number in its respective frame. The second component is the adjustment for multiple frames using the single frame method (Lohr 2009), in which the probabilities of selection of all the overlapping frames are added, and the resulting weight is obtained as the inverse of this total probability of selection. Finally, the third component is the multiplicity adjustment for the number of eligible children in the household.

The frame weights were computed based on the frame counts and the number of released units (phone numbers or addresses) as shown in Table 3. For the list sample, these counts are based on the original study from which the pre-screened list was drawn.

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Table 3. Total and Released Counts by Frame Type, and Frame-Specific Weights

Frame	Frame count	# sampled	Frame weight f_i^{FRAME}
RDD	282869000	801506	352.92
Pre-screened list	283761200	139163	2039.06
ABS	122630000[1]	67265	1823.09
Cell	424769400	50000[2]	8495.39

[1]The number of the addresses in the ABS frame is an estimate.

[2]The number of samples in the cell frame was actually 5000; a factor of ten was added to avoid outrageously different weights.

The multiple frame adjustment was made by applying the single-frame weighting method (Lohr 2009; Kalton and Andesron 1986). The principle can be simply explained as follows. If there are only two frames A and B with frame weights f_i^A and f_i^B, respectively, where a denotes the subsample in frame A only; b denotes the subsample in frame B only, and ab denotes the subsample in the overlap between frames A and B, the single-frame weight is given by

$$b_i = \begin{cases} f_i^A, \text{if } i \in a \\ f_i^B, \text{if } i \in b \\ \dfrac{1}{1/f_i^A + 1/f_i^B}, \text{if } i \in ab \end{cases}$$

In the more general case, there may two or more overlapping frames, and the geometric averaging of weights extends to the overlapping frames as needed.

For the NatSCEV II multiple frame adjustment, the following assumptions were made:

1. The ABS frame covers all other frames.

2. The pre-screened list frame is contained in the RDD frame because the original study from which the list frame was drawn was an RDD sample. The pre-screened list frame is assumed as a fixed prior to sampling the other frames although it features its own probability of selection as explained above.

3. Other overlaps are determined by the existing types of phone variable defined as follows:

   (a) Landline only: CELL1A is defined and not equal to 1

   (b) Cell-only: PHONE1 is defined and equal to 1 or 9

   (c) Both landline and cell: CELL1A is defined and equal to 1; PHONE1 is defined and is equal to 2 or 3.

Denoting the frame probability of selection as $\pi_i^{\text{TYPE}} = 1/f_i^{\text{TYPE}}$, where f_i^{TYPE} is the frame weight yields the baseline probabilities of selection of the phone number weights provided in Table 4.

Table 4. Baseline Probabilities of Selection of the Phone Number Weights by Frame

Frame	Landline only	Cell only	Both landline and cell
RDD	$1/(\pi_i^{ABS}+\pi_i^{RDD})$ $= 120.211\ [\ 250\ ]$	N/A	$1/(\pi_i^{ABS}+\pi_i^{RDD}+\pi_i^{CELL})$ $= 118.534\ [\ 3010\ ]$
Pre-screened list	$1/(\pi_i^{ABS}+\pi_i^{RDD}+\pi_i^{LIST})$ $= 113.519\ [\ 26\ ]$	N/A	$1/(\pi_i^{ABS}+\pi_i^{RDD}+\pi_i^{CELL}+\pi_i^{LIST})$ $= 112.022\ [\ 436\ ]$
ABS	$1/(\pi_i^{ABS}+\pi_i^{RDD})$ $= 120.211\ [\ 32\ ]$	$1/(\pi_i^{ABS}+\pi_i^{CELL})$ $= 178.479\ [\ 327\ ]$	$1/(\pi_i^{ABS}+\pi_i^{RDD}+\pi_i^{CELL})$ $= 118.534\ [\ 391\ ]$
Cell	N/A	$1/(\pi_i^{ABS}+\pi_i^{CELL})$ $= 178.479\ [\ 14\ ]$	$1/(\pi_i^{ABS}+\pi_i^{RDD}+\pi_i^{CELL})$ $= 118.534\ [\ 17\ ]$

In Table 4, the numbers in parentheses are counts of the observations with these weights. Finally, a multiplicity correction is applied by multiplying the weight adjusted for multiple frames by the number of children in the household censored above at 5:

$$w_i = b_i * (\ \#\ of\ children\ 0\text{-}17\ )$$

The coefficients of variation for the baseline (0.132) and multiple frame weights (0.520) are in the acceptable mild to moderate range.

(b) Post-stratification Weights

The sampling frames available for survey research provide imperfect coverage of U.S. households with children. Moreover, to the extent that the covered households we were unable to contact and the contacted households that refused to participate differ from the surveyed households on demographic factors that are likely to affect the response distribution of important, substantive variables, there is the potential for the noncoverage bias to be exacerbated by nonresponse bias.

Post-stratification weighting is the standard procedure used to compensate for bias created by unit nonresponse (i.e., demographic differences between survey participants and nonparticipants that are likely to impact the distribution of key survey variables and inference from the sample estimates to the population values) in surveys where a comprehensive nonresponse study that includes a physical attempt to contact and interview at least a sample of non-respondents is not feasible within budget, In essence, this process involves the identification of expected population values using census or other existing data, and the computation of various weighting adjustments designed to match the survey sample demographics to the expected population distribution. The post-stratification weights for NatSCEV II were developed using the 2010 American Community Survey Public Use Microdata Sample File (ACS PUMS).

Weight Calibration

The final trimmed weights summarized in Table 5 were computed with a raking procedure that used the variable "prewt" was as the starting point. The ACS 2010 control totals used for the adjustment were:

- Household income, broken into categories compatible with the existing income data, and aggregated for rough income as necessary
- Child's gender by age (2x7) groups
- Child's age by race (7x3) groups (non-Hispanic white, non-Hispanic black, other)
- Census region
- Number of adults in the HH
- Number of children in the HH
- NHIS 2011 phone status: cell only, cell mostly, other

The target control totals for these variables are provided in Appendix 3. As shown in Table 5, the demographic weight "demweight" stretches the income distribution too much, overweighting the poor and underweighting the rich. Consequently, an alternative weight that included an income adjustment "sesweight" was created. Finally, in order to reduce the coefficient of variation in "sesweight", a trimmed version "sestrweight" was created and selected as the final weight.

Table 5. Summary of the Weight Variables Used to Adjust the NatSCEV II Data

Variable Name	prewt	demweight	sesweight	sestrweight
Standard deviation / Coefficient of Variation	0.271	1.007	1.194	1.134
Minimum	0.01	0.009	0.0004	0.140
Maximum	0.471	8.365	14.17	6.000
Mean/sd, income <$20K	0.399	1.313	1.035	1.032
	0.106	1.409	1.439	1.374
Mean/sd, income $20K-$50K	0.399	1.136	1.060	1.059
	0.106	1.167	1.389	1.270
Mean/sd, income $50K+	0.397	0.850	0.963	0.964
	0.109	0.724	1.005	0.982

STANDARDIZED OUTCOME RATES

Key Definitions Used to Compute the Standardized Rates

The unweighted disposition counts for each of the four sampling frames in the 2011 NatSCEV II Survey and the weighted AAPOR contact, cooperation, refusal, and response rates are presented in Appendix 2, summarized in this section, and examined in further detail in the nonresponse analysis. The key elements and definitions used for the computation of the outcome rates are:

- **Completed interviews.** These are 100% completed surveys defined as any interview completed by a parent or guardian representing a 0-9 year old child and any interview completed by a parent and an adolescent representing the selected 10-17 year old.

- **Partial interviews.** These are surveys where the adult portion of the interview was completed for a selected adolescent, but the child portion is less than 100% complete. We used question PI37, the last question administered to all parents or guardians in the adult portion of the interview as the indicator. In households where the designated child was 10-17 years old, any adult interview with a response to PI37 where the youth interview was less than complete was counted as a parent complete, or partial interview. Partial interviews include incomplete surveys conducted with a screened respondent where a successful callback to complete the youth survey could not be made, adult refusals to grant permission for a youth interview, adolescent refusals to complete the child portion of the interview where parent or guardian permission was granted, and incomplete youth interviews.

- **Screen outs.** These include completed household screeners indicating that there were no children under 18 years of age in the household, the respondent resided in New Hampshire, or there was no adult aged 18 years or older residing in the household.

- **Eligible non-interviews.** These include cases that were determined to be eligible, but terminated at some point during the interview prior to qualifying as a Partial Interview. Screened Non-Interviews include refusal or callback terminations occurring <u>after</u> the screening questions determined that the household was eligible and the designated child was selected, but before PI37.

- **Unknown eligibility, non-interviews**. These include any contacts with a household or cell phone respondent that terminated <u>before</u> the screener questions could be asked to determine eligibility. These non-interviews with unknown eligibility include hang-ups, refusals and callbacks, voicemail contacts, and contacts which individuals who could not communicate effectively with an interviewer. Contacts with households of unknown eligibility also include numbers that were always busy or had no answer on all attempts.

- **Not eligible.** Ineligible numbers include fax or data lines, non-working or disconnected numbers, and business or other non-household numbers. This category also includes calls made to screened households that resulted in a screen-out.

Disposition Summary by Type of Sampling Frame

Landline RDD Sample: Of the total 801,506 randomly selected national landline telephone numbers sampled, 67% were determined to be non-working or bad phone numbers, including 59% not-in-service and 5% which were confirmed as business or government numbers. An additional 29% of the working numbers in the landline sample yielded households that did not meet the survey's eligibility criteria to participate in the survey. Only 2% of the working numbers in the landline sample resulted in a completed or partial interview.

Listed National RDD Sample: A total of 3,573 randomly selected listed (pre-screened) landline telephone numbers were sampled. In the pre-screened sample, 7% of the numbers were non-working or bad phone numbers, including 5% which were not in service and 2% which were confirmed as business or government numbers. About one-third (33%) of the working numbers in the pre-screened sample yielded households that did not meet the eligibility criteria to participate in the survey, and 21% of the working numbers resulted in a completed or partial interview.

Address-Based Sample (ABS): The ABS sampling design had two stages, a mail screening survey followed by the CATI survey. In the first stage, a paper version of the screening questionnaire and cover letter were mailed with a postage paid return envelope to 70,924 households in order to screen for children under age 18 currently living in the household. Among the 2,979 screening questionnaires (4.2%) completed and returned to Abt SRBI, 1,854 or 2.6% of the total mailed out (and 62.2% of those returned) were from households with children and included a legible phone number. In the second stage, the 1,854 returned household phone numbers were loaded into CATI. Contact attempts with these numbers revealed that 9% were non-working or bad, including 6.5% not-in-service and 2% which were confirmed as business or government numbers. Among the 1,694 ABS numbers determined to be working numbers, 56.8% resulted in a complete or partially completed interview and 27% yielded ineligible households.

Cell Phone RDD Sample: A small national sample of 5,000 randomly selected cell phone numbers comprised the fourth and final frame. Within the cell phone frame 34% of the numbers were non-working or bad, including 31% not-in-service and 8.0% confirmed as business or government numbers. Only 1.4% of the 3,303 working numbers in the cell phone RDD sample resulted in a complete or partially completed interview and 12% were ineligible households.

Weights Used to Compute the Weighted Response Rate

AAPOR (2011) recommends the use of baseline (inverse probability of selection) weights for the computation of response rates in complex designs with unequal probabilities of selection. In NatSCEV II, all of the counts (I for interviews, P for partial interviews, etc.) should be replaced by weighted counterparts.

We considered two sets of weights for this purpose. The first set of weights is the raw frame weights, the first component of the baseline weights, as described above. These weights are constant within the frame. The second set of weights is the set of average baseline weights that include the frame probability of selection, as well as correction for multiple frames. These weights vary within the frame to the extent that different frames overlap, and different households and/or children within a household may be present in different frames (and different combinations of frames). An example where the same child could be selected in two different frames would be a landline-only household where the selected child resides with his grandmother on school days and a cell-only household where he resides with his father on weekends. To compute appropriate population-based averages, the final raked weights were used to compute the average frame weights. We believe that the resulting averages represent the underlying probabilities of selection of an arbitrarily taken unit in the frame in the most accurate manner.

NONRESPONSE ANALYSIS

Although the NatSCEV II design and budget limit the types of nonresponse analyses that are feasible to those that rely on the existing sample information, there are methodologically sound approaches that do not require the collection of supplemental data from survey nonrespondents. For this analysis, we use logistic regression to compare households with partial vs. completed interviews using the same definition of a partial interview used to compute the survey response rate (see page 23). The 7,317 households eligible for inclusion in this analysis represent the sum of the 4,503 completed and the 2,814 partial interviews. However, the demographic and opinion variables required to estimate even a basic nonresponse model have some missing data. Consequently, 1,289 households are dropped by the listwise deletion, leaving 6,028 households for the logistic regression analysis. Among these, 2,721 (45.1%) are partial interviews and 3,307 (54.9%) are complete.

Table 7 reports the final model used to predict the likelihood of a partial interview using the unweighted data. In order to minimize the number of cells with missing data and capture the education effect observed with less collapsing of the response options to PI21, the adult's education level has been dichotomized into no college education (P_EDUC2=0) vs. at least some college (P_EDUC2=1). The other predictors are also simple indicators with presence of the trait = "1" and absence = "0". A "1" on the perception of violence as a problem in the child's school (SCH_VIOL) or neighborhood (NGHB_VIOL) indicates that the adult perceives violence as either somewhat of a problem or a big problem whereas a "0 indicates that violence is either not too much of a problem or no problem at all.

Table 7. Logistic Regression Analysis Predicting Likelihood of Partial vs. Complete Interview

Predict Partial Interview	B	Std. Error	Sig.	Exp(B)	95% Confidence Interval for Exp(B)	
					Lower Bound	Upper Bound
Intercept	-.816	.123	.000			
[P_EDUC2=0]	.168	.055	.002	1.183	1.062	1.318
[P_EDUC2=1]	0[b]	.	.	.	.	.
[TWO_BIO=0]	.142	.056	.012	1.153	1.032	1.287
[TWO_BIO=1]	0[b]	.	.	.	.	.
[P_AID=0]	.435	.072	.000	1.545	1.342	1.779
[P_AID=1]	0[b]	.	.	.	.	.
[SCH_VIOL=0]	-.203	.080	.012	.816	.697	.956
[SCH_VIOL=1]	0[b]	.	.	.	.	.
[NGHB_VIOL=0]	.360	.091	.000	1.433	1.199	1.714
[NGHB_VIOL=1]	0[b]	.	.	.	.	.

[a] This parameter is set to zero because it is redundant.

Compared to households where the entire interview was completed, partial interviews were likely to occur in two parent households, households that did not receive financial aid, and households where the adult caretaker had no college education, Curiously, the perception of school violence and neighborhood violence as problematic have opposite effects on the likelihood of completing the entire interview vs. a partial interview. Households where the adult caretaker did not perceive school violence as much of a problem were more likely to complete the entire interview (less likely to complete only a partial interview) in contrast to households where the adult caretaker did not perceive neighborhood

violence as much of a problem. In the latter case, the household was less likely to complete the entire interview (more likely to complete only a partial interview).

Table 8. Correlation Matrix for Logistic Regression Analysis Predicting Likelihood of Partial vs. Complete Interview

		MODEL_C	P_EDUC2	TWO_BIO	P_AID	SCH_VIOL	NGHB_VIOL
MODEL_C	Pearson Correlation	1	.028[*]	.049[**]	.082[**]	-.021	.042[**]
	Sig. (2-tailed)		.017	.000	.000	.104	.000
	N	7317	7299	7317	7317	6066	7284
P_EDUC2	Pearson Correlation		1	.156[**]	-.276[**]	-.099[**]	-.105[**]
	Sig. (2-tailed)			.000	.000	.000	.000
	N		7299	7299	7299	6051	7266
TWO_BIO	Pearson Correlation			1	-.287[**]	-.126[**]	-.151[**]
	Sig. (2-tailed)				.000	.000	.000
	N			7317	7317	6066	7284
P_AID	Pearson Correlation				1	.118[**]	.206[**]
	Sig. (2-tailed)					.000	.000
	N				7317	6066	7284
SCH_VIOL	Pearson Correlation					1	.202[**]
	Sig. (2-tailed)						.000
	N					6066	6043
NGHB_VIOL	Pearson Correlation						1
	Sig. (2-tailed)						
	N						7284

*. Correlation is significant at the 0.05 level (2-tailed).

**. Correlation is significant at the 0.01 level (2-tailed).

Whereas all of the bivariate correlations between the variables in Table 8 are statistically significant with the exception of the correlation between the perception of school violence as a problem and the likelihood of completing a partial interview p=0.104 (two-sided), most are very small to small (in the 0.03 to 0.019 range). The moderately large correlations (in the 0.20-0.40 range) are the negative correlations between receipt of financial assistance and the adult caretaker's education level and the presence of both biological parents in the household, and the positive correlation between receipt of financial aid and the perception of neighborhood violence as a problem – all of which make sense. While the positive correlation between the perceptions of neighborhood and school violence is also moderately sized, the correlation between receipt of financial aid and the perception of a violence problem in the child's school is small.

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NATIONAL SURVEY OF CHILD & YOUTH SAFTEY II
RDD version/CELL Phone (Dual Frame) Screener Questions

INTERVIEWER:_____ Date:_____
TELEPHONE #: ____ ____ ____-____ ____ ____-____ ____ ____ ____
- -
SAMPLE READ IN: PHONE

[There should be 1 refusal conversion attempt a week later on an initial or qualified refusal, which then becomes a Second/hard refusal if not successful. No additional attempts after that.]

PARENT SCREEN AND CONSENT

Adult Interview – RDD version, CELL Phone (Dual Frame), List assisted

SAMPLE VERSION
1 – RDD (Quota: 3500)
2 – ABS "dual frame" ABS Cell Phone and ABS Landline (Quota: 1000)

[CATI NOTE: All cases must remain in their original versions]
IF ABS CELL PHONE SAMPLE use this script….

Sc1.

Hello, I'm _____ from Abt SRBI, a national research firm. We are calling to follow up on a survey you completed for us a few weeks ago.

Are you in a safe place to talk right now?

    1
                                                                                            Y
        es
    2
        No, call me later

        SCHEDULE CALLBACK
    3
        No, CB on landline

        RECORD NUMBER, schedule call back
    9
        Refused

                                                                                            T

HANK AND END – Soft Refusal

Sc2 Are you currently driving?

1 Yes

HANK & END, CALLBACK

2 No

9 Refused

HANK AND END – Soft Refusal

Sc3 Are you at least 18 years old?

1 Yes

2 Yes, but call me later

SCHEDULE CALLBACK

3 No

HANK AND END (SO Under 18)

9 Refused

HANK AND END **– Soft Refusal**

Sc4 To be sure we are representing the experiences of people from various states, could you please tell me, are you currently living in New Hampshire?

1
Y

es

T

HANK AND END (SO Live in NH)
2

No

CONTINUE TO Intro before CON2
9

Refused

T

HANK AND END **– Soft Refusal**

If, RDD/LANDLINE version – use this intro

Hello, I'm _____ from Abt SRBI calling on behalf of the University of New
Hampshire. We are not selling anything. We are conducting a national survey on issues of
children's safety in the United States. This is an important study that will give us a better
understanding of the kinds of problems that children face and help us to better plan for the
future needs of children and their families.

[IF NEEDED: "May I speak to an adult in the household?" Re-read introduction if a new person
comes to the phone]

If ABS LANDLINE version

Hello, I'm _____from Abt SRBI .

If ABS CELL or ABS LANDLINE version

We recently sent you a short survey for a study we are conducting on behalf of the University of
New Hampshire on issues of children's safety in the United States. We also sent you a $5 check
as a Thank You. This is an important study that will give us a better understanding of the kinds of
problems that children face and help us to better plan for the future needs of children and their
families.
Your household was randomly selected to represent American households in this study.

[FOR ABS LANDLINE, READ IF NEEDED: "May I speak to an adult in the household?" Re-read
introduction if a new person comes to the phone].

IF SAMPLE TYPE=3=CELL RDD:
SC1   Hello, I'm _____ from Abt SRBI calling on behalf of the University of New
Hampshire. We are conducting a national survey on issues of children's safety in the United
States. This is an important study that will help us to better plan for the future needs of
children and their families. Are you in a safe place to talk right now?

    1.   Yes
    2.   No, call me later
        SCHEDULE CALLBACK
    3.   No, CB on landline
        RECORD NUMBER, SCHEDULE CALLBACK
    9.   Refused
        THANK AND END (SOFT REFUSAL)

    Sc2   Are you currently driving?

    1   Yes   **THANK & END, CALLBACK**
    2   No
    9   Refused   **THANK AND END – Soft Refusal**

Sc3 Are you at least 18 years old?

1   Yes
2   Yes, but call me later   **SCHEDULE CALLBACK**
3   No   **THANK AND END (SO Under 18)**
9   Refused   **THANK AND END – Soft Refusal**

Sc4 To be sure we are representing the experiences of people from various states, could you please tell me, are you currently living in New Hampshire?

1   Yes   **THANK AND END (SO Live in NH)**
2   No   **CONTINUE TO Intro before CON2**
9   Refused   **THANK AND END – Soft Refusal**

CON1. deleted

CON2. Are there any children between the ages of 1 month and 17 years old living in this/your household, whether they are home now or not?

1   Yes
2   No [Thank and end interview. Screen out because no 0-17 year old child in house.]
3   Refused [END - Not Qualified]

CON3. We need to speak to the parent or guardian living in the/your household who is likely to be most familiar with the everyday activities of the child/children. May I speak to that person?

1   Speaking [GO TO CON6]
2.   New person comes to phone [GO TO NINTRO]
3   Not here [SCHEDULE CALLBACK AND ASK FOR FIRST NAME]
4   Refused [GO TO CON4]

        QUAL LEVEL 1

CON4. Could I send you a letter explaining the study?

1   Yes [CODE DISPOSITION AS WANTING LETTER AND SET CALLBACK FOR 7 DAYS]
2   NO [GO TO CON5]
4   Refused [GO TO CON5]

CON5. Would you please tell me why you do not want to participate?

        _____
9   Refusal (Hard)

[END - QUALIFIED]

[IF NEW ADULT IN HOUSEHOLD COMES TO PHONE, READ:]

NINTRO. Hello, I'm _____ from Abt SRBI, calling on behalf of University of New Hampshire. We are not selling anything. We are conducting a national survey on issues of children's safety in the United States. This is an important study that will give us a

better understanding of the kinds of problems that children face and help us to better plan for the future needs of children and their families.

[IF NEW ADULT IN HOUSEHOLD COMES TO PHONE **and ABS CELL or ABS LANDLINE version**, READ:]

Hello, I'm _____from Abt SRBI . We recently sent you a short survey for a study we are conducting on behalf of the University of New Hampshire on issues of children's safety in the United States. We also sent you a $5 check as a Thank You. This is an important study that will give us a better understanding of the kinds of problems that children face and help us to better plan for the future needs of children and their families.
Your household was randomly selected to represent American households in this study.

CON6. How many children, age 1 month and 17 years old, are living in this household?

_____ number currently living in household (0=8, 8=OR MORE)
9=Refused [END - QUALIFIED]
[IF 0, SCREEN OUT]

CON7. What is the age of the (first/second/third/ETC.) child, age 1 month to 17 years old, who is living in the household? (INTERVIEWER: If less than 1 years old, enter "0")
Second child? 3rd? etc.
[CATI: RANGE = 0 TO 17]

Child 1 age (years)_____
Child 2 age (years)_____
Child 3 age (years)_____
Child 4 age (years)_____
Child 5 age (years)_____
Child 6 age (years)_____
        19=Refused [END - QUALIFIED]

IF ONLY ONE CHILD AGED 0 TO 17, THIS IS THE DESIGNATED CHILD. GO TO INSTRUCTIONS BEFORE CON8b.

IF MORE THAN ONE CHILD IS IN ELIGIBLE AGE RANGE, SAY:

CON8. For the next questions we need to focus on just one child. Could you tell me which of these children (aged 0 to 17) has had the most recent birthday/will have the next birthday? (INTERVIEWER: ACCEPT MULTIPLE OF SAME AGE & BIRTHDATE AS ONE CHILD FOR THIS QUESTION)

    SHOW AGES FROM CON7:
    age of designated child [IN YEARS] (0-17)
    19=Refused [END - QUALIFIED]

If said child was 0 (under 1 year old) in CON7, ask CON8b:
Con8b. RECORD INFANT'S AGE IN MONTHS IF RESPONENT ALREADY TOLD YOU. IF UNSURE ASK: How many months old is your infant?
        _____ (1-11, 18=ns, 19=ref)

CON9. Is your (READIN: AGE OF SELECTED CHILD) a boy or a girl? (INTERVIEWER: If multiple of same age & birthdate, say you would like to ask about the child that was born 1st)

1   Male
2   Female
3   Refused [END - QUALIFIED]

DUMMY TYPE = 1 (CAREGIVER) IF CHILD IS 0-9
         = 2 (YOUTH) IF CHILD IS 10-17

if TYPE=1 caregiver, ask parent consent CA
if TYPE= 2 youth, ask parent consent CB

CA. PARENT CONSENT TO CONTINUE WITH PARENT-REPORT INTERVIEW FOR CHILD 0-9
     YEARS OLD

As I mentioned earlier, we are conducting a survey for the University of New Hampshire on the experiences of children in the United States. You have been randomly selected to represent parents of children in your [age] year (month) old's age group.
To thank you for participating in the survey, at the end of the interview, we will send you a check for **$30** as a token of our appreciation. The survey takes about 30-40 minutes.
      This study is being supported by the U.S. Office of Justice Programs and will include over 4,500 children across the country. [READ IF NEEDED: We want to find out about potentially stressful circumstances that children sometimes confront, and how we may better protect kids from dangerous situations. This is an important study that will give us a better understanding of the kinds of problems that children face and help us to better plan for the future needs of children and their families.]
      We will be asking you about things that may have happened to your [age] year (month) old at school, in your neighborhood, or at home. We will also ask you some questions about his/her health and behavior. This interview is completely confidential; you or your child's name will not be recorded or linked to the answers that you provide. The interview is completely voluntary – you can, of course, decline to participate in the interview or can refuse to answer any particular question.
      [READ IF NEEDED: If you would like to check on the authenticity of this study, I can give you a toll-free number to confirm it – 1-800-772-9287. We would also be happy to send you a letter before the interview, if you would like that.]

PI1.   If
you don't have any questions, we'll begin.

                                        1
                                        Y
es

                                        [
SKIP TO PI3]

QUAL LEVEL 2

                                        2

Want to confirm

ARRANGE CALLBACK]

[
3

Want to think about it

ARRANGE CALLBACK]

[
4

                          Refused

                          RECORD REASON IN PI1B AND END – QUALIFIED, hard refusal]

[

PI1B.

Would you please tell me why you do not want to participate?

_

_____
        9

Refusal [END - QUALIFIED]

CB. PARENT CONSENT TO CONTINUE WITH PARENT INTERVIEW FOR ADOLESCENTS AGE 10-17

As I mentioned earlier, we are conducting a survey for the University of New Hampshire on the experiences of children in the United States. Your family has been randomly selected to represent parents of children in your [age] year old's age group.

To thank you for participating in the survey, at the end of the interview, we will send YOU a check for **$10** as a token of our appreciation. Your interview will take about 10 minutes.
This study is being supported by the U.S. Office of Justice Programs and will include over 4,500 children across the country. [READ IF NEEDED: We want to find out about potentially stressful circumstances that children sometimes confront, and how we may better protect kids from dangerous situations. This is an important study that will give us a better understanding of the kinds of problems that children face and help us to better plan for the future needs of children and their families.]

We'd like to ask you a few questions about your [AGE]-year old's household, about your child's school or neighborhood, and about how your child's health has been lately. We assure you that the interview is completely confidential; you or your child's name will not be linked to the answers you provide. Your participation is voluntary, and if there is a question you would prefer not to answer, that's ok.

[READ IF NEEDED: If you would like to check on the authenticity of this study, I can give you our toll-free number to confirm it--- 800-772-9287. We would also be happy to send you a letter before the interview, if you would like that.]

PI2.   If you don't have any questions, we'll begin.

1
Y
es

[
GO TO PI3]

QUAL LEVEL 3

2

Want to confirm

[
ARRANGE CALLBACK]

3

Want to think about it

[
ARRANGE CALLBACK]
            4   (VOL) Refused (Qualified)

[
                            RECORD REASON IN PI2B AND END QUALIFIED; hard refusal]

PI2B. Would you please tell me why you do not want to participate?

_

_____

9

Refusal [END - QUALIFIED]

Appendix 2
NatSCEV II Standardized AAPOR Outcome Rates by Frame Type

SRBI

		Cross-section RDD	Cross-section Listed	Address Based Sample	Cell Phone RDD
Interview (Category 1)					
Complete	1.000	3,260	462	750	31
Partial	1.200	2,360	225	213	16
Eligible, non-interview (Category 2)					
Refusal and breakoff	2.100	5,173	454	77	54
Unknown eligibility, non-interview (Category 3)					
Busy	3.120	5,043	2	1	84
No answer	3.130	65,460	97	25	224
Answering machine	3.140	43,690	199	174	1,128
Foreign Language - NON-SPANISH	3.200	1,273	16	2	18
No screener completed	3.210	58,353	753	248	1,260
Other	3.900	1,285	11	-	11
Not eligible (Category 4)					
Fax/data line	4.200	29,762	14	5	20
Non-working/disconnect	4.300	472,858	189	120	1,532
Temporarily out of service	4.330	626	-	-	10
Business, government office, other organizations	4.510	37,190	59	35	135
Screen-Out	4.700	75,173	1,092	204	477
Total phone numbers used		801,506	3,573	1,854	5,000
Completes (1.0)	I	3,260	462	750	31
Partial Interviews (1.2)	P	2,360	225	213	16
Refusal and break off (2.1)	R	5,173	454	77	54
Non Contact (2.2)	NC	-	-	-	-
Other (2.3)	O	-	-	-	-
Unknown household (3.1)	UH	114,193	298	200	1,436
Unknown other (3.2, 3.9)	UO	60,911	780	250	1,289
Not Eligible (4.0)	NE	615,609	1,354	364	2,174
e = Estimated proportion of cases of unknown eligibility that are eligible.	(I+P+R+NC+O)/((I+P+R+NC+O)+NE)	0.017	0.457	0.741	0.044
Response Rate 1	I/(I+P) + (R+NC+O) + (UH+UO)	0.018	0.208	0.503	0.011
Response Rate 2	(I+P)/(I+P) + (R+NC+O) + (UH+UO)	0.030	0.310	0.646	0.017
Response Rate 3	I/((I+P) + (R+NC+O) + e(UH+UO))	0.236	0.283	0.546	0.140
Response Rate 4	(I+P)/((I+P) + (R+NC+O) + e(UH+UO))	0.407	0.420	0.701	0.212
Cooperation Rate 1	I/(I+P)+R+O	0.302	0.405	0.721	0.307
Cooperation Rate 2	(I+P)/((I+P)+R+O))	0.521	0.602	0.926	0.465
Cooperation Rate 3	I/((I+P)+R))	0.302	0.405	0.721	0.307
Cooperation Rate 4	(I+P)/((I+P)+R))	0.521	0.602	0.926	0.465
Refusal Rate 1	R/((I+P)+(R+NC+O) + UH + UO))	0.028	0.205	0.052	0.019
Refusal Rate 2	R/((I+P)+(R+NC+O) + e(UH + UO))	0.375	0.278	0.056	0.243
Refusal Rate 3	R/((I+P)+(R+NC+O))	0.479	0.398	0.074	0.535
Contact Rate 1	(I+P)+R+O / (I+P)+R+O+NC+ (UH + UO)	0.058	0.514	0.698	0.036
Contact Rate 2	(I+P)+R+O / (I+P)+R+O+NC + e(UH+UO)	0.782	0.698	0.757	0.455
Contact Rate 3	(I+P)+R+O / (I+P)+R+O+NC	1.000	1.000	1.000	1.000

Appendix 3

WEIGHTING TARGETS

Age by Sex

Population: U.S. Population (excluding New Hampshire) under age 18
Source: 2008 and 2010 ACS 1 Year Estimates PUMS

	2008 ACS	2010 ACS
Boy 0-1 years	0.057595	0.052793
Boy 2-4 years	0.087301	0.085726
Boy 5-6 years	0.053845	0.055566
Boy 7-9 years	0.083877	0.084259
Boy 10-11 years	0.055171	0.057583
Boy 12-14 years	0.085344	0.086840
Boy 15-17 years	0.088829	0.089256
Girl 0-1 years	0.054987	0.050977
Girl 2-4 years	0.082732	0.081690
Girl 5-6 years	0.051413	0.054383
Girl 7-9 years	0.079924	0.081312
Girl 10-11 years	0.052601	0.054100
Girl 12-14 years	0.081696	0.081696
Girl 15-17 years	0.084685	0.083819
	1.000000	1.000000

Age by Race

Population: U.S. Population (excluding New Hampshire) under age 18
Source: 2008 and 2010 ACS 1 Year Estimates PUMS

	2008 ACS	2010 ACS
0-1 years Non-Hispanic White	0.058351	0.052714
0-1 years Non-Hispanic Black	0.014850	0.014182
0-1 years Other race	0.039381	0.036874
2-4 years Non-Hispanic White	0.090400	0.084832
2-4 years Non-Hispanic Black	0.022288	0.023175
2-4 years Other race	0.057344	0.059409
5-6 years Non-Hispanic White	0.058262	0.057848
5-6 years Non-Hispanic Black	0.013875	0.014579
5-6 years Other race	0.033121	0.037522
7-9 years Non-Hispanic White	0.091394	0.087963
7-9 years Non-Hispanic Black	0.022850	0.022846
7-9 years Other race	0.049558	0.054762
10-11 years Non-Hispanic White	0.061882	0.060599
10-11 years Non-Hispanic Black	0.014805	0.015889
10-11 years Other race	0.031085	0.035195
12-14 years Non-Hispanic White	0.096337	0.092878
12-14 years Non-Hispanic Black	0.024334	0.024133
12-14 years Other race	0.046380	0.051526
15-17 years Non-Hispanic White	0.102405	0.096515
15-17 years Non-Hispanic Black	0.026226	0.026031
15-17 years Other race	0.044882	0.050529
	1.0000	1.0000

Phone Service

Universe: Households with children under 18 in U.S. with telephone service
Source: 2008 and 2010 NHIS Microdata File

	2008 NHIS*	2010 NHIS
Cell only household	0.189077	0.318311
Cell-mostly household	0.188237	0.225001
Other	0.622686	0.456688
	1.00000	1.00000

*Not asked in 2008

Household Income

Universe: Households with Related Children Under 18 in the U.S. (Excluding New Hampshire)
Source: 2008 and 2010 ACS 1 year PUMS Microdata

	2008 ACS	2010 ACS
< $5,000	0.032100	0.038449
$5,000 to < $10,000	0.031150	0.037214
$10,000 to < $15,000	0.039712	0.044774
$15,000 to < $20,000	0.043612	0.048147
$20,000 to < $30,000	0.092303	0.097311
$30,000 to < $40,000	0.093271	0.094756
$40,000 to < $50,000	0.085675	0.084524
$50,000 to < $75,000	0.188817	0.180331
$75,000 to < $100,000	0.140750	0.130966
= > $100,000	0.252610	0.243527
	1.00000	1.00000

Total Number of Households with Related Children under 18 in the US (excluding New Hampshire)

Universe: Households with Related Children Under 18 in the U.S. (Excluding New Hampshire)
Source: 2008 and 2010 ACS 1 year PUMS

	2008	37,219,722
	2010	37,727,520

Number of Adults in Household

	2008 ACS	2010 ACS
1 Adult	0.238242	0.239826
2 Adults	0.589201	0.568040
3 Adults	0.120497	0.130003
4 Adults	0.038598	0.044554
5+ Adults	0.013463	0.017576
	1.0000	1.00000

Number of Related Children under 18 in Household

	2008 ACS	2010 ACS
1 child	0.426051	0.424767
2 children	0.364563	0.363936
3 children	0.146223	0.146486
4 children	0.045106	0.045684
5+ children	0.018055	0.019127
	1.00000	1.000000

Region

	2008 ACS	2010 ACS
Northeast	0.171706	0.170760
Midwest	0.222383	0.217156
South	0.375496	0.376063
West	0.230415	0.236021
	1.00000	1.00000

Household Income

	2008 ACS	2010 ACS
< $5,000	0.032100	0.038449
$5,000 to < $10,000	0.031150	0.037214
$10,000 to < $15,000	0.039712	0.044774
$15,000 to < $20,000	0.043612	0.048147
$20,000 to < $30,000	0.092303	0.097311
$30,000 to < $40,000	0.093271	0.094756
$40,000 to < $50,000	0.085675	0.084524
$50,000 to < $75,000	0.188817	0.180331
$75,000 to < $100,000	0.140750	0.130966
= > $100,000	0.252610	0.243527
	1.00000	1.00000