An Introduction to the National Inmate Study

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Abstract:

The Prison Rape Elimination Act (PREA) of 2003 (P.L. 108-79) requires the Bureau of Justice Statistics (BJS) to develop new national data collections on the incidence and prevalence of sexual assault within correctional facilities. The Act requires BJS to survey each year not less than 10% of all federal, state, and local correctional facilities and to provide facility-level estimates of sexual assault for each sampled facility. To fully implement PREA, BJS has developed a multiple-measure, multiple-method data collection strategy. One of these data collection activities, the National Inmate Survey (NIS), involves obtaining information directly from adult inmates on their experiences with sexual assault. This paper provides an overview of the NIS Pilot Study, which was conducted in preparation for national implementation. We include discussions of human subjects issues, design of the facility sample, development of the survey instrument, the special arrangements that must be made to conduct interviews in correctional facilities, the process of collecting data, and the NIS Pilot Study results.

Keywords: prisoners, inmates, sexual assault, rape, ACASI, sensitive behaviors

Background

Although prevalence estimates vary, it is generally acknowledged that some proportion of the incarcerated population is sexually victimized. Inmates are under the care of Federal, state, or local authorities, and as such should be kept safe from victimization to the extent prevention of such activities is possible. The Prison Rape Elimination Act (PREA) of 2003 (P.L. 108-79) mandates funding for a number of studies on sexual victimization in correctional facilities. The need for these studies is founded in two related problems: (1) some inmates are sexually assaulted and (2) the validity and reliability of existing data on this phenomenon are inadequate.

There is relatively little research on the sexual assault of inmates, and the validity and reliability of the methods employed and data generated by existing research are largely flawed. The few existing studies have used a variety of definitions, timeframes, and methods yielding unfocused epidemiological data and a wide range of prevalence estimates. For example, Struckman-Johnson and Struckman-Johnson (2000) estimated that 21% of incarcerated males in four Nebraska State prisons experienced pressured or forced sexual contact. Tewksbury (1989) found that none of the inmates in an Ohio prison reported being raped, but almost 5% reported that another inmate tried to use threats or force to make them have sex. Hensley, Tewksbury, and Castle (2003) found that approximately 1% of male inmates in an Oklahoma prison reported being raped, but almost 14% were threatened sexually. Generally, estimates

of the prevalence of sexual assault in corrections range from 0 to 40 percent (for a complete summary of the literature see Gaes & Goldberg, 2004).

Although these studies conclude that sexual assault occurs in correctional facilities and provide some insight into the dynamics of such events, there are serious methodological limitations and inconsistencies across these studies that limit the utility and comparability of their findings. Many prison rape studies utilizing personal interviews or self-administered questionnaires suffer from very low response rates (e.g., less than 30%), and few attempt to compare respondents to non-respondents in an effort to address concerns about selection bias or to assess their samples for representativeness. For example, the Struckman-Johnson & Struckman-Johnson (2000) study that obtained a sexual assault prevalence rate of 21% considered the issue of selection bias, conceding that respondents were different from non-respondents in terms of age, race, instant offense, and sentence length. The inmate response rate for this study was below 29% and the authors did not conduct any statistical tests on these results or attempt to adjust for nonresponse (Struckman-Johnson & Struckman-Johnson, 2000). Additionally, existing studies have used a wide variety of definitions and interview instruments, and there have been no efforts to weight data to adjust for non-response (Gaes & Goldberg, 2004). As a result, there is a need to standardize definitions and concepts; conduct more statistically rigorous sampling; and develop and employ improved data collection and analytic methods to encourage participation and honest responses, assess samples for representativeness, and adjust for selection bias resulting from non-response.

PREA requires the Bureau of Justice Statistics (BJS) to develop new national data collections on the incidence and prevalence of sexual assault within correctional facilities. The Act requires BJS to survey each year not less than 10% of all federal, state, and local correctional facilities and to provide facility-level estimates of sexual assault for each sampled facility. To fully implement PREA, BJS has developed a multiple-measure, multiple-method data collection strategy. One of these data collection activities, the National Inmate Survey (NIS), involves obtaining information directly from adult inmates on their experiences with sexual assault within the correctional facility in which they are housed. The NIS addresses the methodological weaknesses inherent in the previous research and will generate much-needed, valid, and reliable data on the prevalence and nature of sexual assault in a large random sample of adults in correctional facilities across the country. This paper summarizes the process of developing and implementing the instrument and protocol for NIS Pilot Study, which was conducted in 2006 in preparation for national implementation. Results from the NIS Pilot Study are also presented.

Protection of Human Subjects

One of the most significant challenges to implementing the NIS Pilot Study was developing a methodology that would provide appropriate protections to the inmates included in the study. Given the sensitivity of the questions to be asked of inmates and the fact that privacy tends to be a rarity in most correctional facilities, the NIS project team met with RTI's Institutional Review Board (IRB) early in the performance period to gain their feedback on our general approach to conducting the study. In addition, BJS staff who were familiar with the constraints of collecting data from inmates assisted with the development of the NIS Pilot Study methodology.

From the start it was clear that data should be collected using audio computer-assisted self-interviewing (ACASI). This methodology allows the respondent to enter answers directly into a computer while hearing the questions read through headphones. Nobody other than the respondent knows how the respondent answers the questions or even which questions are asked. Previous research with ACASI has

shown that reporting of sensitive behaviors increases when ACASI is used as compared with more traditional interviewer-based methodologies (see for example Turner, et al., 1998). In addition, ACASI allows respondents with very limited literacy to participate in the survey without comprising the privacy of the interview setting for these individuals. Given the education level of most inmates is lower than that for the general population of the U.S., this was an important feature of ACASI for the NIS. Additional protections that were added include:

- The requirement that interviews take place in private locations where the inmate and interviewer cannot be overheard and where the laptop screen cannot be seen by other inmates or facility staff.

- Inmates are randomly assigned to receive either the questions about sexual victimization or questions about drug and alcohol use. Nobody, not even the interviewer, knows which questions the inmate receives so even if an inmate chooses to participate in the NIS there is no certainty that he/she has been asked about experiences with sexual victimization.

- Inmates are told that if they find any aspect of the interview distressing they may skip questions they find upsetting, terminate their participation at any time, and speak with a mental health counselor.

- The questionnaire is programmed so that each inmate's interview lasts approximately 30 minutes. Thus, no assumptions can be made that an inmate who finishes quickly likely did not report sexual victimization or that an inmate who takes more time has reported some type of sexual victimization.

- In order to minimize the possibility of inmates becoming upset, any inmate who refuses to answer three consecutive questions in the sexual victimization portion of the questionnaire is skipped out of the remaining sexual victimization questions.

- Inmate names are never connected to interview data. In addition, the case ID number used to record result codes in the NIS Case Management System (CMS) are encrypted using a hashing algorithm at the start of the interview so that the interview data cannot be linked back to information stored in the CMS.

Our final study methodology was approved by RTI's IRB as well as by the Bureau of Prisons IRB and, where required, the IRB of each state's Department of Corrections.

Instrumentation

Design of the NIS Pilot Study instrument required balancing several competing priorities: addressing the requirements of the PREA legislation, minimizing respondent burden, maximizing data quality, addressing concerns raised by RTI's IRB, ensuring questions were understood consistently across all respondents and in a manner consistent with the researchers' intent, and putting the respondents at ease with what is obviously a very sensitive topic. Cognitive testing was conducted on early drafts of the NIS instrument. Due to concerns regarding the willingness of current inmates to talk candidly with an interviewer about the questions, all cognitive testing was completed with former inmates. Participants

were recruited from the records of recently-released individuals in the Raleigh/Durham area of North Carolina. The cognitive interviews focused on the sexual victimization questions with the goal of determining whether the questions were:

- Written using language that could be understood by individuals with little formal schooling
- Understood as intended by the researchers
- Understood consistently across participants

In addition, we were interested in each participant's general reaction to the content of the questions, whether he/she felt inmates would be willing to answer such questions, and what concerns, if any, he/she would have had about participating in such a study while incarcerated. Both male and female participants were interviewed. All interviews were conducted in English. Based on the results of this testing, revisions were made to the instrument.

As noted earlier, the sensitive portions of the NIS questionnaire were designed for ACASI administration. However, basic demographic data and data on reasons for incarceration are included in the instrument and are administered by an interviewer. The interviewer enters the inmate's answers into the laptop in a traditional computer-assisted personal interviewing (CAPI) format. Following the CAPI modules, the interviewer leads the inmate through a short tutorial where the inmate learns to use the computer him/herself (how to enter answers, change an answer, enter a Don't Know or Refused response, etc.). The tutorial also allows time for the inmate to make sure he/she can hear the audio through the headphones. Questions in this tutorial are not sensitive and are not used in any analyses of the NIS data. At the end of the tutorial, the interviewer answers any final questions the inmate may have and then moves to a place in the room where she can no longer see the laptop screen but can tell if the inmate is experiencing any difficulties and can answer any questions. At the end of the interview, the inmate answers a short set of debriefing questions regarding his/her experience with the interview. The inmate then lets the interviewer know that he/she has finished and passes the laptop back to the interviewer. The program automatically locks the ACASI data so the interviewer cannot backup and see any answers entered by the inmate. The interviewer completes her own set of debriefing questions regarding any distractions or interruptions that occurred, any questions raised by the inmate, and any distress the inmate exhibited, and then finalizes the interview.

As noted earlier, the instrument was designed to ensure that interview length is reasonably constant across inmates regardless of how they answer the questions. For inmates assigned to receive the sexual victimization questions, a timer keeps track of how much time has been expended when the end of the victimization questions are reached. If sufficient time remains, the inmate is routed into some or all of the drug and alcohol questions in order to fill out the 30 minute length. Table 1 provides an overview of the topic areas included in the NIS Pilot Study.

Table 1. Content of the NIS Pilot Study Instrument

Topical Area	Inmate Assigned to Sexual Victimization Questions	Inmate Assigned to Drug/Alcohol Questions
Demographics	✓	✓
Criminal History	✓	✓
ACASI Tutorial	✓	✓
Sexual Activity with Inmates	✓	
Non-consensual Sexual Activity with Inmates	✓	
Sexual Activity with Staff	✓	
Other Victimization	✓	
Drug Use Prior to Incarceration	If time allows	✓
Alcohol Use Prior to Incarceration	If time allows	✓
Drug and Alcohol Treatment Received Prior to Incarceration	If time allows	✓
Inmate Debriefing Questions	✓	✓
Interviewer Debriefing Questions	✓	✓

The instrument was developed for touchscreen administration and the project purchased Panasonic Toughbook laptops with touchscreen capability. These laptops are designed to be more resilient in adverse computing environments which seemed like a good idea for this study. Much of the keyboard functionality was disabled due to concerns that some inmates might try to hack into the laptop without the interviewer noticing. In addition, to address concerns raised by some corrections staff, all wireless capabilities on the laptops were disabled as well.

In addition to the ACASI instrument, a paper and pencil instrument (PAPI) was also developed to allow inmates who might not be able to leave their cells to participate in the NIS. Based on conversations with correctional staff, we learned that some inmates would be deemed too much of a security risk or too dangerous to be allowed to meet with the interviewer and complete the ACASI questionnaire. However, since our goal is to include as much of the inmate population as possible in the NIS, we were not willing to simply categorize these inmates as "unavailable for interview." The PAPI questionnaire was designed to be very short (approximately 10 minutes). Only the items critical to generating estimates of sexual assault were included and no drug or alcohol questions were included. The instrument makes only limited use of skip patterns in an effort to minimize response errors.

In both the ACASI and PAPI instruments, all questions regarding sexual assault were bounded by a reference period. In prisons, the reference period was the previous 12 months if the inmate had been in the facility for at least that long. Inmates who had been at the prison less than 12 months were asked only about assaults that had occurred since they had arrived at the facility. Due to the shorter stays experienced by jail inmates, a six-month reference period was used in the jails (or since the inmate arrived at the facility if that was less than six months ago). As the NIS must provide data on the current rate of sexual assault at each facility included in the sample, the use of these reference periods reduces the chance that inmates will report an assault that occurred long ago and thus may have limited relevance in determining the current scope of the problem in a given facility.

As is the case when collecting data on sensitive behaviors, we were concerned about the possibility that inmates would under report their experiences with sexual assault. Such underreporting may occur due to embarrassment, a desire to keep such painful experiences private, or fear of their answers being disclosed. However, it also seemed possible that some inmates might choose to over report their experiences; perhaps as a way to get facility administrators in trouble or as a way to direct attention to the facility more generally. Because the relative magnitude of these reporting errors is unknown, we incorporated multiple measurements of inmate-on-inmate sexual assault into the instrument in order to conduct a Latent Class Analysis (LCA). LCA is a statistical method for predicting an individual's "true" classification based upon his/her "observed" classification. LCA uses a statistical model that incorporates characteristics of the inmate along with his/her responses to the survey questions about their experiences with sexual assault to estimate the probability that the individual has been victimized. Each response pattern is associated with a probability of victimization and these probabilities can also vary depending upon the other characteristics in the model. In our analyses the following explanatory variables were considered: age, race, ethnicity, sex, education level, time since admittance to the facility, and facility type (jail or prison). LCA provides estimates of the true proportion of the population who has been victimized as well as false negative and false positive error rates associated with each question about sexual assault. Error rates can also be estimated as a function of individual characteristics.

Sample Design

Although the PREA legislation requires that the NIS sample be comprised of not less than 10% of all federal, state, and local correctional facilities in the United States, the Pilot Study was conducted on a significantly smaller scale with facilities selected for their willingness to help in the development of the NIS methodology. Specifically, the Pilot Study was conducted in eight facilities: 3 jails, 1 federal prison, and 4 state prisons. Additional information on these Pilot Study facilities is included in Table 2.[1]

Inmates 18 and older in the facilities were randomly selected to participate in the NIS Pilot Study. A few days prior to the start of data collection in each facility, facility staff sent a roster of all inmates held in the facility. The roster contained only information that is publicly available such as the inmate's name, age, and sex. A sampling statistician used the roster to select the sample of inmates. A precision level of $(0.02)^2$ was chosen for the prisons included in the Pilot Study and a precision level of $(0.01)^2$

[1] Given the goal of the Pilot Study was to test procedures for conducting the NIS with the assumption that at least some procedures would need to be revised prior to conducting Year 1 of the NIS, the decision was made to not disclose the identities of the facilities included in the Pilot Study.

was chosen for the jails. These levels were chosen based on our best estimate of what actual prevalence rates of sexual assault might be (4% for prisons and 2% for jails) and on the desire to avoid having to suppress estimates that could not be distinguished from zero. We also assumed a response rate of 80% and chose to randomly assign 90% of inmates to the sexual victimization items and 10% to the drug/alcohol items.

In jails, only inmates who had been arraigned were eligible for the study. This decision was made due to the extreme instability of the pre-arraignment jail population and our concern that many of the pre-arraigned inmates would be released by the time our interviewers arrived at the facility. A stratified approach was used to select the jail samples to ensure that both post-arraignment/pre-sentenced and post-sentenced inmates were included in the samples. The resulting sample size for each facility is included in Table 2.[2]

Table 2. Facilities Included in the NIS Pilot Study

Facility	Type	Size	Period of Data Collection	Sample Size
1	Prison	2,016	4 days	300
2	Prison	1,906	4 days	270
3	Prison	1,922	3 days	310
4	Prison	1,371	5 days	340
5	Prison	1,987	4 days	310
6	Jail	1,026	5 days	321
7	Jail	1,039	5 days	260
8	Jail	3,383	4 days	318

The sample of inmates was then transmitted electronically to the field staff in advance of the first day of interviewing.

Facility Logistics

Once BJS staff had obtained commitments from the NIS Pilot Study facilities to participate, RTI staff contacted each facility to determine what, if any, human subjects review was required by the facility, the best week for data collection to occur, and to collect information needed by the data collection team. This information included things such as:

- Number of private interviewing rooms available (necessary in order to determine how many interviewers to send to the facility)

[2] A more detailed description of the Pilot Study sampling procedures can be found in the Data Collection Final Report for the NIS Pilot Study.

- Hours of the day and days of the week interviewing could take place (including any downtime that would occur during the day to allow for meals or counts)
- Background check requirements for the interviewing team
- Mental health resources and the process for accessing them
- Handling of personal belongings (what could be brought into the facility by the interviewers)
- Need for Spanish-speaking interviewers
- Whether an incentive for participation would be offered[3]
- Point of contact at the facility

During these logistical calls, RTI staff also provided an overview of the study and answered any questions facility staff had about what participation in the Pilot Study would entail.

In advance of data collection, RTI project staff visited most facilities included in the Pilot Study. These visits served as opportunities to learn more about the different types of environments in which our interviewers would be working and to learn about the relative burden experienced by a facility in preparing for and cooperating with this legislatively-mandated study. The facilities included in the NIS Pilot Study were large facilities and all had sufficient space which met the privacy requirements of the study. However, it was clear from these visits that participation was not without burden to the facilities. For example, facilities assigned staff specifically to work with the interviewing team – to escort inmates to and from the interviewing rooms and to maintain the safety of the interviewers. In addition, facility staff worked to identify creative solutions for allowing as many of the selected inmates to participate as possible. In some cases this meant that inmates completed the ACASI interview while handcuffed to a wall or that private space was identified in the disciplinary segregation units where inmates from these units could be placed in order to complete the PAPI questionnaire.

Based on our experience with the NIS Pilot Study, one problem was identified with our logistical procedures. During the Pilot Study we provided basic information about the study to our facility contact person and recommended the information be shared with any other staff who would be working with the interviewing team. As it turned out, this information was shared somewhat haphazardly and even when it was shared it was obvious that not all staff had as clear an understanding of the study as we might have liked. As a result, staff assigned to escort inmates to the interviewing rooms sometimes provided an overview of the study to the inmates that wasn't completely accurate or were unable to answer detailed questions raised by the inmates. In hindsight this wasn't particularly surprising. However, it did point to one change for the last few facilities in the Pilot Study; namely the requirement that each inmate hear about the study from one of our interviewers and make the decision to participate only after

[3] Incentives were not included in the methodology for the NIS Pilot Study due to the huge expense of providing them for the main study. However, facilities were encouraged to consider offering a small incentive to inmates. When a facility expressed willingness to do so, the incentive was reviewed by RTI's IRB to verify that it was not coercive. Only one facility in the Pilot Study offered an incentive – the choice of either a free haircut or an extra hour of recreation time.

this complete explanation was provided. This change resulted in fewer inmates refusing to come to the interviewing room. In addition, it ensured that each inmate would hear an accurate and complete description of the study and have the opportunity to make a decision about participation in a private setting. Information about the study was still provided to the facility in advance of data collection and we continued to encourage the facility to share the information with any staff who might be involved with the interviewing team.

Data Collection

Prior to the start of data collection at a given facility, the sample was transmitted to the field staff and downloaded onto the laptop of the Onsite Supervisor (OS - the lead interviewer on the team). For purposes of interviewing, we classified facilities as either centralized or decentralized. In centralized facilities, all interviewing space was co-located (usually along a corridor or in one particular wing of the facility). In decentralized facilities, interviewers were assigned to work all of the cases for a particular housing unit and their interviewing rooms were assigned so that each interviewer sat in a room in their assigned unit. This distinction was important with regard to how cases were worked at the facility. In centralized facilities, the OS worked with a facility liaison to have inmates called one at a time or in small groups. An inmate was assigned to whichever interviewer was available when the inmate arrived with the OS playing the role of "traffic cop." The OS maintained a master sample roster and worked to ensure every inmate on the roster was called prior to the end of data collection. Individual interviewers did not have a specific caseload of inmates to work. In contrast, in decentralized facilities the sample of inmates was divided by housing unit and each interviewer was responsible for working all of the cases in her assigned unit. In these facilities, the OS was able to work as an interviewer as there was no need for her to oversee the flow of inmates. Decentralized facilities bore more similarity to a traditional interviewing assignment wherein each interviewer has cases assigned to her at the start of data collection and it is her responsibility to fully work the caseload before data collection ends.

Once an inmate was escorted to the interviewing room, the interviewer verified the inmate's identity and then administered the informed consent. Inmates gave verbal consent but were not asked to sign a paper consent form to assure confidentiality. If an inmate agreed to participate the interviewer began the computerized interview. If an inmate was unwilling to participate, he/she was excused and the interviewer recorded the appropriate disposition code in the CMS. As inmates were identified who were not allowed to come to the interviewing room, the OS worked with the facility liaison to determine whether PAPI data collection could take place. If arrangements could be made, an interviewer was escorted to the inmate's location to administer the informed consent and PAPI interview (if the inmate was willing).

In situations where a sampled inmate was unavailable when called, subsequent attempts were made to call the inmate over the course of the data collection period. The OS worked with the facility liaison to determine the reason for each inmate's lack of availability and further attempts were informed by this information. For example, the OS might determine that a particular inmate had been transferred to another facility and further attempts to call the inmate were unnecessary. In contrast, an inmate might be in court for the day but was expected back the next day and could be called again at that time.

Interviewers transmitted data to RTI each night after leaving the facility. Completed interview data and result codes for all cases worked during the day were transmitted. Any completed PAPI questionnaires

were sent via FedEx to RTI each day. Reports documenting the results were generated each morning for review by the project team. As noted earlier in Table 1, data collection at each facility was completed within our targeted five days and in most cases in fewer than five days. With such a short data collection period, it was critical that any problems experienced by the interviewers be corrected as quickly as possible. Fortunately, we had no hardware or software failures or other situations that delayed data collection.

Results from the Pilot Study

Response Rates

Across the eight facilities, a total of 2,429 inmates were sampled for the NIS Pilot Study. Of this group, a total of 104 inmates were determined to be ineligible either because they were under the age of 18, had mental or physical disabilities that precluded their participation, or had been transferred or released prior to the start of data collection. Of the remaining 2,325 inmates, 1,498 were interviewed for an overall response rate of 64.4%. However, response rates varied significantly across the eight facilities. Facility-specific response rate data are shown in Table 3.

Table 3. Response Rates by Facility

Description	Prisons					Jails		
	1	2	3	4	5	6	7	8
Total Sampled	300	270	310	340	310	321	260	318
Total Eligible	291	264	305	339	303	280	293	293
Respondents	169	202	155	224	218	167	163	200
Response Rate	58.1%	76.5%	50.8%	66.1%	72.0%	59.6%	65.2%	68.3%
Refusal Rate	22.0%	15.2%	21.6%	20.7%	7.3%	22.1%	18.8%	25.9%

Also of interest is the participation rate; defined as the percentage of inmates who chose to participate after actually meeting with an interviewer. Participation rates ranged from 74% to 93%, with the higher rates achieved in facilities where data collection occurred after the protocol change that reduced the role of facility staff in explaining the study to selected inmates. These results provided support for the protocol change and the revised procedure used for Year 1 of the NIS.

Using administrative data provided by each facility (age, race, gender, ethnicity, date of admission, primary offense, and total maximum sentence), we conducted an assessment of the nonresponse bias present in the Pilot Study data. Bias was assessed by comparing the characteristics of the full sample to that of the respondents for each facility. In order to show whether the relative bias was statistically different from zero, one-sample t-tests were generated for each variable. Next, Cohen's effect size was calculated to determine whether the distribution of respondents was different than the population distribution. None of the variables had an effect size larger than 0.2. Although interpretation of the Cohen statistic is somewhat arbitrary, an effect size of 0.3 or less is typically interpreted to indicate little bias is present in the data. Nevertheless, the data from the Pilot Study were weighted to reduce the impact of nonresponse.

Prevalence Rates

Estimates of sexual assault were calculated for each facility. As definitions of this phenomenon vary dramatically in the existing literature, it is important to clearly define how the estimate of sexual assault was constructed for the NIS Pilot Study. Based on the original PREA legislation, sexual assault was disaggregated into: sexual contact through the use of inmate force, sexual contact through the use of inmate coercion or pressure, and any sexual contact between inmates and facility staff. Sexual contact includes oral, anal, and vaginal sex (all of which involve penetration) as well as touching of the butt, thighs, breasts, or genitals in a sexual way. Based on these definitions, across all facilities and weighted for nonresponse, the rate of any sexual assault was 4.3%.[4] Facility-specific estimates of the various measures of sexual assault, weighted for nonresponse, are presented in Table 4. As can be seen from these data, the rate of any sexual assault ranges from as low as 0.7% to as high as 10.4%.

[4] Due to the non-probablistic methods used to select the sample of facilities, the prevalence rates obtained from the NIS Pilot Study should not be used to make inferences to the national inmate population or to other individual facilities.

Table 4: Weighted Percentage of Inmates Who Reported Sexual Assault by Facility

	Facility																	
	1		2		3		4		5		6		7		8		Total	
	n=151		n=188		n=141		n=198		n=191		n=154		n=142		n=178		n=1,343	
Description	%	SE	%	SE	%	SE	%	SE	%	SE	%	SE	%	SE	%	SE	%	SE
Any sexual assault	**4.48**	**1.72**	**2.59**	**1.14**	**4.02**	**1.53**	**4.91**	**1.70**	**7.85**	**1.87**	**4.77**	**1.87**	**10.38**	**2.66**	**0.73**	**0.51**	**4.27**	**0.53**
Any sexual assault involving no more than touching	1.52	1.03	0	0	2.03	1.14	1.00	0.65	5.36	1.59	0.91	0.88	4.27	1.77	0.37	0.36	1.70	0.34
Any sexual assault involving penetration	2.96	1.41	2.59	1.14	1.99	1.03	3.91	1.58	2.49	1.05	3.86	1.65	6.11	2.02	0.37	0.36	2.58	0.41
Nonconsensual sexual contact with another inmate	**1.47**	**0.99**	**0.50**	**0.48**	**3.45**	**1.43**	**2.84**	**1.27**	**5.35**	**1.54**	**1.57**	**0.96**	**9.28**	**2.58**	**0**	**0**	**2.43**	**0.38**
Nonconsensual sexual contact involving no more than touching	0	0	0	0	3.19	1.41	0.48	0.45	3.53	1.25	0	0	4.27	1.77	0	0	1.17	0.27
Nonconsensual sexual contact involving penetration	1.47	0.99	0.50	0.48	0.26	0.25	2.35	1.19	1.82	0.92	1.57	0.96	5.01	1.91	0	0	1.25	0.28
Any sexual contact with staff	**3.75**	**1.59**	**2.59**	**1.14**	**1.99**	**1.03**	**2.08**	**1.17**	**4.64**	**1.47**	**3.55**	**1.64**	**3.13**	**1.41**	**0.73**	**0.51**	**2.63**	**0.43**
Nonconsensual sexual contact with staff	1.47	0.99	0.89	0.61	1.99	1.03	1.03	0.67	4.14	1.39	2.64	1.39	3.13	1.41	0	0	1.70	0.33
Nonconsensual sexual contact involving no more than touching	0	0	0	0	0	0	0.51	0.48	2.16	1.05	0	0	0.19	0.18	0	0	0.33	0.14
Nonconsensual sexual contact involving penetration	1.47	0.99	0.89	0.61	1.99	1.03	0.51	0.48	1.98	0.93	2.64	1.39	2.93	1.40	0	0	1.37	0.30
Consensual sexual contact with staff	3.02	1.43	2.59	1.14	0	0	1.05	0.96	1.18	0.70	1.27	0.94	0.53	0.37	0.73	0.51	1.30	0.31
Consensual sexual contact involving no more than touching	1.52	1.03	0	0	0	0	0	0	0	0	0.91	0.88	0	0	0.37	0.36	0.39	0.19
Consensual sexual contact involving penetration	1.50	1.01	2.59	1.14	0	0	1.05	0.96	1.18	0.70	0.36	0.34	0.53	0.37	0.37	0.36	0.91	0.24

Note: Inmates are counted if they respond affirmatively to at least one survey question that is used in building the estimates of sexual assault.

Table 5 includes similar data by gender of the inmate. The rates of sexual assault are twice as high for the females (6.5%) than it is for the males (3.1%) in the NIS Pilot Study. Contrary to popular belief, however, this disparity is primarily driven by differences in the rate of nonconsensual sexual contact with another inmate rather than to sexual contact between inmates and staff.

Table 5. Weighted Percentage of Inmates Who Reported Sexual Assault by Gender

	Male		Female		Total	
	n=856		n=487		n=1,343	
Description	%	SE	%	SE	%	SE
Any sexual assault	**3.14**	**0.60**	**6.50**	**1.05**	**4.27**	**0.53**
Any sexual assault involving no more than touching	0.72	0.30	3.62	0.81	1.70	0.34
Any sexual assault excluding touching	2.42	0.52	2.88	0.68	2.58	0.41
Nonconsensual sexual contact with another inmate	**1.05**	**0.33**	**5.13**	**0.94**	**2.43**	**0.38**
Nonconsensual sexual contact involving no more than touching	0.06	0.06	3.35	0.78	1.17	0.27
Nonconsensual sexual contact excluding touching	0.99	0.32	1.78	0.52	1.25	0.28
Any sexual contact with staff	**2.39**	**0.53**	**3.11**	**0.73**	**2.63**	**0.43**
Nonconsensual sexual contact with staff	1.08	0.35	2.91	0.71	1.70	0.33
Nonconsensual sexual contact involving no more than touching	0.07	0.06	0.86	0.40	0.33	0.14
Nonconsensual sexual contact excluding touching	1.01	0.35	2.06	0.59	1.37	0.30
Consensual sexual contact with staff	1.69	0.44	0.55	0.27	1.30	0.31
Consensual sexual contact involving no more than touching	0.59	0.29	0	0	0.39	0.19
Consensual sexual contact excluding touching	1.10	0.34	0.55	0.27	0.91	0.24

Operational Aspects

The NIS Pilot Study data were also examined for indications of how well the study protocol and survey instrument performed. In this regard interview length is one important indicator. Our goal in developing the ACASI instrument was to create an environment in which the length of time an inmate took to complete the survey would be fairly standard regardless of how he/she answered the questions. The results from the Pilot Study indicate we were successful. The average interview length was 27.3 (standard deviation of 7.4 minutes) minutes; quite close to the 30 minutes referenced in our informed consent materials. Spanish-speaking respondents took longer than English speaking respondents (36.4 minutes versus 27.5 minutes). Respondents who reported one or more assaults took longer than those who did not report an assault (31.3 minutes versus 27.5 minutes). Neither of these differences were statistically significant, however.

Another operational measure of interest to us was the rate of interview break-offs (defined as a case in which the inmate started but did not complete the interview). A total of 24 inmates (1.8%) randomly assigned to receive the sexual assault questions terminated the interview at some point during these questions. Based on the interviewer comments, it appears these inmates were not distressed by the nature of the questions but rather were concerned about missing some other activity at the facility (e.g., a meal, a job, or recreation time).

Even if inmates agree to participate and complete the entire interview, it is still possible they could choose to refuse to answer or give a 'don't know' response to any individual question(s) in the interview. If a large enough number of inmates do not provide usable data to the critical items in the

questionnaire (e.g., those used to calculate the sexual assault prevalence estimates) the utility of the survey effort would be greatly reduced and could even suggest that our procedures for collecting these sensitive data were not sufficiently secure (or at least were not viewed as such by the inmates). A review of the Pilot Study data indicate that missing data rates ranged from zero to 0.6% with no consistent patterns to suggest changes to the instrument were needed.

As noted earlier, we conducted a latent class analysis to assess the NIS Pilot Study data for response error. Based on these analyses we found that, at least with regard to the inmate-on-inmate sexual assault measures, our instrument performed quite well. To the extent that error exists in the NIS Pilot Study data, our items appear to slightly underestimate the actual prevalence of sexual assault.

Finally, we included several debriefing questions for the inmate and the interviewer. Based on self-reports, 96% of inmates found the computer was "not difficult at all" to use. In addition, 88% of inmates reported they were very or somewhat comfortable answering the sex and sexual assault questions. This percentage was slightly lower, 82%, for those inmates who reported some type of sexual assault. Results from a similar question found 89% of inmates reported that answering the sex and sexual assault questions were "not upsetting at all." Not surprisingly, a smaller number (68%) of inmates who reported some type of sexual assault reported the questions were not upsetting at all. Based on interviewer reports, 96% of inmates did not appear upset at all during the ACASI administration. However, consistent with the inmate reports, the percentage of inmates who did not appear upset to the interviewer was lower for inmates who had reported some type of sexual assault (68%) although obviously the interviewers were unaware of which inmates had reported being assaulted.

We also included one final question for inmates which asked whether they had experienced any type of sex or sexual assault in the facility during the past 12/6 months (or since they arrived at the facility) that they had chosen to not report in the survey. Three percent of respondents indicated there was some experience they had not disclosed. Interestingly, a third of respondents who had reported some type of sexual assault indicated there were things they had not disclosed. Whether these inmates chose to not disclose a particular type of assault is unknown.

Conclusions

Overall, the NIS Pilot Study was successful. Our protocol was implemented in a variety of facility types and with a diverse group of inmates. With the help of facility staff we were able to conduct all interviews in a private setting. The overwhelming majority of interviews (98%) were conducted via ACASI. In addition, our interviewers were able to fully work the sample at each facility within the five-day schedule we had arranged with each facility. During debriefing calls with our facility liaisons, we learned that although having our interviewers in the facility had created some additional burden, the burden was less than had been anticipated. Overall, facility staff reported that participating in the NIS Pilot Study had been a positive experience.

We were also encouraged by the participation rates. Particularly once we adjusted our procedure for having only our interviewers explain the study to randomly sampled inmates (as opposed to having facility staff assist with this), we were convinced that response rates for the Year 1 NIS would be high enough to meet the precision requirements necessary to achieve the objectives of the PREA legislation.

One concern voiced by RTI's IRB – that inmates could become seriously distressed as a result of participating in the NIS – was not born out by our experience in the Pilot Study. Although mental health counselling was made available to all selected inmates, few inmates requested such counselling. More importantly, we experienced no severe reactions of any kind from the inmates, and thus did not have to make any mandatory reports to facility staff.[5]

The NIS Pilot Study is the first study to collect data on inmate sexual assault using a carefully designed protocol crafted to maximize participation and honest reporting while at the same time protecting the rights of the inmates who participate. Rigorous sampling procedures ensure the data collected can be used to generate reliable estimates for each facility included in the Pilot Study. Once these procedures are combined with an equally rigorous plan for probability-based facility-level sampling, as we will do for Year 1 of the NIS, we are confident the results will allow us to provide high quality data that will enable BJS to meet the requirements of the PREA legislation and provide Congress with data by which they can rank the randomly sampled correctional facilities in terms of their rates of sexual assault prevalence.

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[5] Mandatory reporting was required in situations where an inmate indicated an imminent intent to harm either him/herself or someone else.