A Longitudinal Survey of Newly-Released Prisoners: Methods and Design of the Boston Reentry Study[1]

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GROWTH IN AMERICAN prison and jail populations over the last 40 years has propelled the U.S. incarceration rate to the highest in the world and made incarceration commonplace for residents of poor inner-city communities. The U.S. penal system now houses around 2.2 million people in state and federal prisons and local jails, and incarceration rates are highest among racial and ethnic minorities and the poor (Glaze & Kaeble 2014; Western, 2006).

Historically high rates of incarceration produced large cohorts of prison releases—over 600,000 annually—who entered a relatively small number of mostly poor neighborhoods, often equipped with few social policy supports. Large numbers of prison releases motivated research on the effects of incarceration on crime and other social and economic outcomes, including employment, health, and the well-being of children with incarcerated parents (Travis, Western, & Redburn 2014; Wakefield & Uggen, 2010, Wildeman & Muller, 2012).

Despite a large body of research studying the effects of incarceration, relatively few studies have examined in detail the process of leaving prison and entering a community. Specialized data collections of post-incarceration experiences have mostly been ethnographic, making field observations on relatively small groups of men and women, often networks of research subjects in a few neighborhoods (e.g., Harding et al., 2014; Fader, 2013; Leverentz, 2014). While qualitative research has been invaluable in its account of life in poor communities under conditions of high incarceration, it often struggles to represent the heterogeneity of prison releasees. Panel surveys have collected data on relatively large samples of released prisoners. In some cases, like the Fragile Families Study of Child Well-Being, formerly incarcerated men were interviewed in a general population survey design (Teitler et al., 2003). In other cases, like the Urban Institute's *Returning Home* study, specialized samples of newly-released prison and jail inmates were interviewed over a one or two year follow-up period (LaVigne & Kachnowski, 2003). With both general population and specialized data collections, formerly-incarcerated respondents showed high rates of study attrition and other kinds of nonresponse.

A longitudinal data collection from a sample making the transition from prison to community offers at least three contributions to research on the effects of incarceration. First, a major challenge for research is the problem of under-enumeration. The formerly-incarcerated are a significantly under-counted population that resists observation with traditional methods of social science data collection. Pettit (2012) describes the incarcerated as "invisible men" whose under-enumeration distorts conventional measures of poverty and inequality. After release, they may be "on the run," as Goffman (2014) describes, evading both researchers and social control agencies. Large-scale data collections are typically built around close attachment to mainstream social institutions like stable households, steady employment, and, among the poor, enrollment in social programs. Men and women released from prison are a large, hard-to-reach population that are often only weakly attached to households, often residing with family and friends or in homeless shelters, and revolving in and out of institutional settings (Travis, 2005; Goffman, 2014; Metraux, Roman, & Cho, 2007). Employment is often unstable and undocumented, and social programs are

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under-used. As a result, the formerly-incarcerated are so weakly connected to mainstream social institutions that they are often inaccessible in standard data collections using surveys or administrative records (Harding et al., 2011; Kornfeld & Bloom, 1999). Those that are observed in the usual data sources are likely to be relatively advantaged compared to the general population of those with prison records.

Second, people who go to prison are acutely disadvantaged in many ways that are often difficult to observe. Life histories of violence and other trauma, cognitive impairment, poor mental and physical health, addiction, and weak family and community supports may all be sources of social and economic hardship after prison. The effects of these frequently unobserved confounding factors may be mistakenly attributed to incarceration. The problem of unobserved heterogeneity is a key focus of research on the effects of incarceration and has motivated analysis with randomized trials, natural experiments, and panel designs (e.g., Pager, 2003; Kling, 2006; Western, 2002). With detailed data collection on a hard-to-reach population, the multiple disadvantages of the formerly-incarcerated become a problem for explanation and analysis instead of just a threat to causal inference.

Third, a detailed data collection from people entering communities after incarceration can improve understanding of the content of administrative and general-purpose survey data. Incarceration effects have often been studied by linking correctional data on imprisonment and prison release to administrative data on outcomes, such as police arrest records or unemployment insurance records on earnings (Grogger, 1995; Kling, 2006; Cho & Lalonde, 2008; Pettit & Lyons, 2009). Alternatively, incarceration has also been measured in population surveys, where respondents are asked about their criminal histories. The interpretation of both kinds of data could be assisted by a specialized data collection that can provide information about the context in which administrative or general survey data are collected. Arrest records, for example, are often interpreted to reflect new criminal conduct but may also be produced by the efforts at supervision by parole and probation authorities. Similarly, surveys asking about the family involvement of prison releasees may have difficulty capturing the full complexity of family relationships in a context of unstable residence and multiple partner fertility (cf., Wakefield & Wildeman, 2013). In short, for a population that is often embedded in a complex web of social relationships and weakly attached to mainstream social roles as workers, citizens, and householders, conventional data collections—even in the absence of under-enumeration—may face serious problems of measurement.

This paper describes the Boston Reentry Study (BRS), a collaboration between researchers at Harvard University and the Massachusetts Department of Correction (DOC). The study provides a mixed-methods, longitudinal data collection from men and women released from state prisons in Massachusetts and returning to neighborhoods in the Boston area. The BRS is tailored to the problem of studying release from incarceration in two main ways. First, the survey instruments are designed to measure special features of the experience of release from incarceration. Survey modules, for example, obtain detailed information on housing and family relationships to reflect the fluid living arrangements and patterns of residence in the period immediately after incarceration. Second, a wide variety of strategies are adopted to maximize response rates and retain study participation for a hard-to-reach population who in many cases have no independent housing and are living with extreme financial insecurity. The BRS is thus designed to fill the current gaps in our understanding of the prison-to-community transition, to address the problems of under-enumeration, measure quantitatively and qualitatively the kinds of characteristics and contexts that distinguish a uniquely disadvantaged population, and capture the complexity of householding, family life, employment, and criminal involvement that is missed in conventional data collections.

We begin by describing the basic design of the study from sample recruitment through the one-year follow-up period. We then describe our main data sources and instruments. This is followed by a discussion of characteristics of the sample in comparison to the population of prison releasees to Boston. Finally, we examine the pattern of study retention.

Study Design

The Boston Reentry Study aimed to sample all releasees from Massachusetts state prisons returning to the Boston area. Respondents were scheduled for five interviews over a one-year follow-up period and again if they were re-incarcerated. Family members were also interviewed to supplement respondents' reports. The BRS survey instruments asked a series of core questions to measure the household structure, family life, and employment of those released from prison. A series of topical modules were also fielded to obtain more detailed information about the process of transition out of prison, employment, children and romantic partners, and life history. To ensure a full accounting of the heterogeneity of the prison population, a variety of measures were taken to maximize study retention.

Sample Selection and the Baseline Interview

The core sample of the BRS consists of 122 Massachusetts state prison inmates who were recruited between May 2012 and February 2013.[2] Study eligibility required that inmates (a) were within one month of their scheduled prison release, and (b) provided a post-release address in the Boston area.

Recruitment into the study was led by the DOC research unit, working with staff contacts in each of the state correctional facilities. Before the initial data collection began, DOC and Harvard researchers met with prison staff to introduce the project and describe the research protocols. DOC research staff then generated a list of inmates who were scheduled to be released from each of the state prisons to the Boston area. Staff contacts at each DOC facility were given letters to be distributed among prison inmates eligible for the study. The letter described the study and invited respondents to participate. The letter identified Harvard University as the institutional base for the research, emphasized that interviews were only for research purposes, and described the compensation that was provided for each interview. Recruitment of respondents to the study varied across institutions. Staff at some facilities had strong interests in reentry programming, took a keen interest in the research, and actively recruited subjects to the study. Perhaps because of respondents' unwillingness to participate at some institutions or the implementation of the study protocol, recruitment proceeded more slowly at other institutions, producing under-representation from medium security facilities. Table 1 (next page) shows the distribution of respondents across Massachusetts state correctional facilities, and the total

[2] We conducted 124 interviews in prison, though two respondents later became ineligible and were not included in main data analysis. One was released out of state to New Jersey, and the second was not released within the time frame of the study.

TABLE 1.
Boston Reentry Study releases and other prison releases to Boston by DOC facility, May 2012 to February 2013.

	BRS	Total releases	Recruitment rate (%)
Women			
South Middlesex	1	12	8.3
MCI-Framingham	14	44	31.8
Pre-release/minimum			
Boston Pre-Release	13	45	28.9
Pondville Correctional Center	18	33	54.5
MCI-Plymouth	1	15	6.7
Northeastern Correctional Center	14	23	60.9
Massachusetts Alcohol and Substance Abuse Center	3	6	50.0
Minimum/medium			
Old Colony Correctional Center	11	51	21.6
MCI-Shirley	4	36	11.1
North Central Correctional Institution at Gardner	0	16	0.0
Medium			
MCI-Concord	13	53	24.5
MCI-Norfolk	9	46	19.6
Bay State Correctional Center	0	14	0.0
Massachusetts Treatment Center	3	5	60.0
Bridgewater State Hospital	1	2	50.0
Maximum			
MCI-Cedar Junction	9	29	31.0
Souza-Baranowski Correctional Center	9	29	31.0
Total (N)	123	459	26.8

Note: One respondent was recruited in the community immediately after prison release. Though eligible and interested in study participation, the respondent was unable to make himself available for an interview until the first few days after release. Two respondents were recruited into the study and are counted here, though they became ineligible for our main sample after release and are not included in follow-up analysis.

number of releases to Boston over the study period. The table indicates particularly high levels of study recruitment from Pondville and Northeastern Correctional Centers, both minimum-security pre-release centers. A small number of recruits to the study also declined to continue to participate after meeting at the baseline interview.

The Massachusetts Department of Correction operates 18 facilities throughout the state. The system includes a state psychiatric hospital, a medical care unit, two women's facilities, and 15 other facilities for men that vary in their custody level from pre-release to maximum security. Prison inmates are released from all security levels to the street following the expiration of sentences or, conditionally, under the supervision of a parole officer. In addition, about one-third of the release population in Massachusetts subsequently serves probation. Whereas recent reentry studies have focused on parolees (LaVigne & Kachnowski, 2003; Harding et al., 2014), the Boston Reentry Study broadly samples from the whole release population. Nearly 40 percent of the BRS participants are not under any form of supervision. These unsupervised releases now account for nearly half of all Massachusetts prisoners (and about a quarter nationwide), providing a valuable contrast with parolees in their conditions of study retention and community reentry.

Respondents were drawn from 15 of the 18 DOC correctional facilities. We deliberately did not recruit respondents from the state's hospital correctional unit, and two other facilities did not provide eligible respondents who would be released to the Boston area during the study time frame. Recruiting participants from a variety of state correctional facilities produced a highly heterogeneous sample. By recruiting from the range of security levels, we obtained respondents who vary widely on length of prison stay, criminal histories, offense severity, and age groups. The survey also includes Massachusetts' main women's prison (MCI-Framingham), and the full sample includes 15 female respondents. Women have not been a key focus of earlier reentry studies (see Leverentz, 2014), though the rapid increase in female incarceration offers strong motivation for studying patterns of household attachment and kin relations among formerly-incarcerated women (Kruttschnitt, 2011).

With a respondent selected and a baseline interview scheduled, two interviewers—one from Harvard and one from the Department of Correction research unit—would visit the prison. Typically the facility contact (usually a correctional program officer) would meet the interviewers and escort them inside. Most interviews were conducted in offices or classrooms and were completed by the interviewers with paper and pencil. A handful of interviews were conducted in more secure settings, either in noncontact units where respondents were behind plexiglass or in locked booths called therapeutic modules.

The baseline interviews began with introductions where the interviewers identified themselves and their affiliations and administered a consent form. The consent form described the research, reassured respondents of the voluntary character of the interviews, and separately obtained signed consent for the interview, DOC administrative records, unemployment insurance records, and MassHealth records. Respondents were also asked for a list of secondary contacts that we could call to help stay in touch after prison release. The interview concluded with making plans for contact in the community approximately one week after prison release. Respondents received a form with a phone number and address for the Harvard study team, and a checklist describing their participation in the consent, the provision of secondary contacts, and the survey interview. The baseline interview typically lasted about an hour, and collected information on demographics and social background, dates for the current incarceration, and information about the conditions of penal confinement. In nearly all cases, the baseline interview was completed, but a few times respondents were called from the interview for a count of the

prison population. In these cases, the baseline interview was completed at the first follow-up interview in the community a few weeks later.

At the baseline interview, respondents provided their expected release date, though it was not always exact, particularly if they were waiting to be released on parole. After respondents were released from DOC custody, the DOC research staff notified Harvard researchers. Upon release, we called respondents using the contact information they provided at baseline, typically the phone number of a close family member or friend. In some instances, we had no contact information for respondents, and they called us upon their release or we located them at residential or transitional housing programs.

Follow-up and Supplementary Interviews

The baseline interview was generally scheduled about one week before prison release. We then conducted four planned follow-up interviews: (1) at one week after release, (2) at two months, (3) at six months, and (4) at twelve months. Each of the follow-up interviews included a core interview and a topical module. The core interview included questions about the respondent's current household, current employment, contact with family, relationships with children, program participation, criminal activity, contact with the criminal justice system, and drug use. To try and capture the process of transition from prison to community, respondents were asked at the one-week interview to complete a time-use module. For each day since release, respondents were asked to describe their main activity, whom they were with, and in which neighborhood they spent most of their time. The module yields a very detailed picture of the first week after prison and indicates, for example, a high level of family contact early in the week that gradually declines over the following seven days (Western et al., 2014). The topical module for the two-month interview asks about respondents' romantic relationships after prison release. At the six-month interview respondents provide an employment history, and additional questions are asked about job seeking and earnings. The twelve-month interview includes a module asking about childhood exposure to violence and other trauma, collects information about the respondent's attitude to criminal justice institutions, and asks about the experience of violence and crime in the year post-release.

Post-release interviews were held in the community, or in a prison or jail facility if the respondent was back in custody (see below). A typical interview setting was a coffee shop in the respondent's neighborhood or near the probation office. Many later interviews took place in respondents' homes or residential programs. To improve data quality, we conducted nearly all interviews in pairs of two Harvard researchers, though several interviews early in the study were conducted one-on-one due to limited research capacity.

The survey interviews yielded quantitative and qualitative data. Each follow-up interview consisted of a few hundred closed-ended questions and generally took one to two hours to complete. In addition to the closed-ended questions, respondents frequently engaged in more informal conversation or elaborated on their answers. All interviews in the community were audio-taped,[3] and extensive notes were taken on the paper-and-pencil interview scripts. Each interviewer also recorded a set of field notes at the end of each interview, which typically described noteworthy responses, features of the interview setting, and the demeanor of the respondent.

In addition to the scheduled interviews, we also conducted interviews with family members and in the event of re-incarceration. Several protocols were developed for re-incarceration, with the general aim of continuing data collection through returns to custody. Rather than using re-incarceration as a censoring point in the design, we used re-incarceration interviews to yield comparisons both to the pre-release interviews and to non-recidivists in the rest of the sample. During the data collection period, the Department of Correction would send the Harvard research team a list describing the criminal justice status of all respondents.[4] Obtained from a query of the Massachusetts criminal justice information system, the weekly update would include a list of new arrests, charges, parole or probation violations, court appearances and re-incarcerations. Family members and close friends were also a key source of information on respondents' custody status and sometimes were able to provide information that did not appear on the official DOC records. If respondents had returned to state prison, we would arrange with the Department of Correction for a re-incarceration interview. If respondents were held in county custody—awaiting trial, re-incarcerated on a violation, or serving a new sentence—we would, with the assistance of the Department of Correction, arrange for a new interview in county facilities. All re-incarceration interviews were conducted in MA prisons or county jails, except for two interviews that took place in Maine county jails.

Follow-up interviews in correctional facilities were completed by two Harvard researchers. The survey instrument asked about the incident that led to the respondent's return to incarceration. It also collected information on respondents' housing, employment and other financial support, family, peer networks, and substance use prior to the recent arrest or violation. The re-incarceration interview included a set of open-ended questions that asked the respondent for an account of the circumstances surrounding his or her return to prison. If respondents were in custody for two (or three) consecutive interview periods, we administered the standard survey instrument at the later interview(s). For example, if a respondent was re-incarcerated near the 6-month date, we administered the re-incarceration instrument. If that respondent was still in custody at the 12-month date, we administered an adapted version of the 12-month survey instrument. Respondents who were re-incarcerated close to their 12-month interview date were given adapted versions of the re-incarceration and 12-month interviews.

We also conducted a round of proxy interviews with key informants whom we expect to be more stably attached to households. At the baseline interview in prison, we asked respondents to provide contact information for close family or friends who might reliably connect us to the respondent after prison release. We expected that maintaining contact with friends and family members might raise the likelihood of retention during the follow-up period. We also asked the focal respondents for permission to conduct interviews with one of the contacts they provided. Throughout the follow-up period, respondents typically gave us additional contact information for family members or close friends as they developed trust in the researchers and gained understanding of the purpose of the study.

The proxy interviews were usually conducted about eight to twelve months after

[3] A few interviews were not audio-taped due to the respondent's preference or an audio recorder malfunction.

[4] Three respondents did not provide consent for Harvard researchers to access their criminal records and were excluded from these lists provided by the DOC.

the focal respondents' prison release.[5] The majority of proxy respondents were female family members—mothers and sisters—though we also interviewed partners, grandmothers, aunts, cousins, brothers, fathers, and adult children.

While proxy interviews with friends and family members were initially conceived as a retention strategy, they emerged as a key area of substantive interest. In addition to collecting information about the proxy respondents themselves, interviews with family and friends provided another source of information about the focal respondents' childhood, their experience of incarceration, and their household and family relationships. The proxy interviews also aimed to collect data on the focal respondents' children and gain a better understanding of their well-being before, during, and after their parents' incarceration. These interviews thus provided further context for the outcomes of an acutely disadvantaged population after release from prison.

Sample Characteristics

Approximately one-fourth of all prison releases to the Boston area in the recruitment period participated in the Boston Reentry Study. Table 2 compares the demographic composition and the recidivism risk of the BRS sample and of other DOC releasees to the Boston area in the study period. Table 2 shows that the BRS sample is demographically similar to the population of Boston releases. The risk of violent recidivism, assessed by an instrument administered by the DOC, is somewhat higher in the BRS sample, though the general recidivism risk of sample respondents is almost equal to that of the population of releasees.

The criminal justice characteristics of the BRS sample are compared to the general population of DOC releasees to Boston in Table 3. There are two significant discrepancies between the study sample and the release population. Prison releases at lower levels of custody are over-represented in

[5] Several proxy interviews were also conducted after the focal respondents' 12-month interview date. We sometimes found it easier to schedule an interview with a family member or close friend soon after contact with the focal respondent at the 12-month interview. Because proxy interviews are a later phase of data collection, they are still ongoing at the time of this paper.

TABLE 2.
Percentage distribution of demographic characteristics and risk assessment scores of BRS respondents compared to other DOC releases to Boston.

	BRS	DOC	Total	P-value of Difference
Female	12.3%	12.2%	12.2%	.49
Age				
Under 30	31.2	28.0	28.8	.26
30 to 39	27.9	34.2	32.5	.10
40 or over	41.0	37.8	38.6	.27
Race/Ethnicity				
White/Other	30.3	28.9	29.3	.38
Black	50.8	45.8	47.2	.17
Hispanic	18.9	25.3	23.6	.08
Recidivism Risk				
High general risk	61.8	58.9	59.6	.29
High violent risk	68.0	59.8	61.9	.05
Total (N)	**122**	**336**	**458**	

Note: The comparison group consists of all DOC releases to the Boston area (minus the BRS sample) during the BRS recruitment period, May 2012 to February 2013. The percentages in high general risk and high violent risk categories are taken from DOC classification with a risk assessment instrument. The percentage of those in the high general risk category is calculated from a sample size of 110 for the BRS, and 316 releasees for the non-BRS group. The percentage of those in the high violent risk category is calculated from a sample size of 100 for the BRS, and 291 releasees for the non-BRS group.

TABLE 3.
Percentage distribution of incarceration characteristics of BRS respondents compared to other DOC releases to Boston.

	BRS	DOC	Total	P-value of Difference
Security Level				
Min/Pre-Release	44.3	33.3	36.2	.02
Medium	41.8	55.4	51.7	.00
Maximum	13.9	11.3	12.0	.23
Governing Offense				
Violent	41.0	27.7	31.2	.00
Drug	21.3	50.3	42.6	.00
Property	16.4	12.8	13.8	.17
Sex	3.3	3.3	3.3	.50
Other	18.0	6.0	9.2	.00
Time Served				
Less than 1 year	21.3	23.2	22.7	.33
1 to 3 years	46.7	47.3	47.2	.45
3 to 10 years	29.5	27.1	27.7	.31
10 or more years	2.5	2.4	2.4	.48
Supervision Status				
Unsupervised	38.5	-	-	-
Supervised	61.5	-	-	-
Total (N)	**122**	**336**	**458**	

Note: The comparison group consists of all DOC releases to the Boston area (minus the BRS sample) during the BRS recruitment period, May 2012 to February 2013. Supervision data not available for other DOC releases during this time period.

the sample, and releases from medium security facilities are under-represented. Drug offenders are also under-represented in the study sample (21.3 percent of respondents compared to 50.3 percent of other releasees).

The discrepancies of custody level and offense type may be due to a large-scale court review of drug evidence during the time of the data collection. Fabricated drug evidence from one forensic laboratory caused a large number of court-ordered prison releases at short notice before inmates could be recruited to the reentry study. Despite the releases, the sample respondents are representative of the population of releases in terms of length of stay in prison and may be more representative of released prisoners in a typical year, in the absence of the crime lab scandal. Indeed, when the releases from the crime lab scandal are removed from the comparison sample, the BRS sample closely resembles the general release population in their offense characteristics.

Study Retention

Panel surveys have collected data on relatively large samples of released prisoners, but these studies have faced high rates of sample attrition. The Urban Institute's *Returning Home* study interviewed large samples of men and women released from prison and jails in Maryland, Illinois, Ohio, and Texas (La Vigne & Kachnowski, 2003; La Vigne & Mamalian, 2003; La Vigne & Thomson, 2003; Watson, Solomon, La Vigne & Travis, 2004). The Urban Institute researchers examined the employment prospects, health, housing opportunities, and family support for those leaving correctional institutions. Although the *Returning Home* study was pioneering, investigating the process of prisoner reentry at scale in a relatively large number of sites, like other data collections with subjects involved in crime and the criminal justice system, it encountered a high rate of study attrition. In the pilot study in Maryland, from an original sample of 324 pre-release interview respondents, 53 percent were lost by the first post-release interview, and at the second interview the nonresponse rate had climbed to 68 percent. The investigators intentionally reduced their sample size to roughly half of their original sample, and at the second post-release interview to one third, due to the high cost of survey retention. The *Returning Home* study experienced high rates of attrition at all of their study sites. Over the course of a year, attrition varied from 39 to 68 percent.[6]

General-purpose population surveys have also been used to study the effects of incarceration. These surveys include the Fragile Families Study of Child Well-Being and the 1979 and 1997 cohorts of the National Longitudinal Surveys. Fragile Families is a child-based survey that includes interviews with mothers and fathers (Reichman, Teitler, Garfinkel, & McLanahan, 2001). Histories of incarceration are obtained from fathers, who are also interviewed if incarcerated in a year of the scheduled survey. Survey nonresponse rates are relatively high among incarcerated fathers. For example, in the third-year follow-up interviews, the survey nonresponse rate for formerly-incarcerated fathers was 36 percent compared to 18 percent for all others. The NLSY79 and NLSY97 also interview respondents who are incarcerated at the time of their scheduled interviews. Both National Longitudinal Surveys sustain a high rate of retention for formerly-incarcerated respondents. However, the NLSY79 only asked about incarceration in the 1980 round, and information about later prison or jail stays is provided by an item recording the respondent's residence. This measure thus underestimates the prevalence of short periods of imprisonment. The NLSY97 provides perhaps the most detailed information about incarceration among the general population surveys but was not specifically designed to study the social and economic life of former prisoners, and information on the substantive problem of prison reentry is scarce.

Retention Strategies

A major goal for the Boston Reentry Study was to maintain a high level of retention for a diverse group of study participants in the year after their release from prison. We consider the problem of study retention in greater detail elsewhere, but analysis indicates that the risk of survey nonresponse is closely related to risk factors for social and economic insecurity after incarceration (Western et al., 2016). Thus a history of substance abuse, mental illness, and homelessness prior to incarceration is associated with the risk of attrition from the study. These factors are also associated with a range of post-release measures of housing, employment, and relapse to addiction. Under these conditions, nonresponse is described as nonignorable, and is a source of bias in data analysis. Maintaining a high rate of study retention is thus important, particularly for understanding social and economic insecurity after incarceration.

An extremely high response rate was sustained through the 29-month field period, from May 2012 to October 2014. The follow-up interview response rate was 96 percent at one week post-release, 93 percent at 2 months, 93 percent at 6 months, and 91 percent at 12 months (Table 4). This represents a high level of retention compared to previous studies on prisoner reentry, particularly so given that nearly 40 percent of the study sample is not under correctional supervision.

Even in cases of missed interviews, the completeness of the panel data could often be repaired. In some cases, researchers were unable to schedule an interview due to, for example, loss of contact or incarceration, but were able to arrange the next scheduled interview. In these instances respondents were often asked time-insensitive questions that they had missed from the previous interview, such as the module on prior work history. The number of missing respondents remained fluid throughout the study period, as researchers would regain contact with respondents after months without communication. All eligible respondents participated in at least one follow-up interview after prison release.

Table 4 (next page) also reports the timing of the follow-up interviews. For the most part, interviews were successfully conducted in line with the follow-up schedule. The one- and two-month interviews were conducted almost exactly as designed, with a median time to follow-up of 7 and 64 days. The standard deviations around these follow-up times (6 and 15 days) indicate that most of the first two follow-up interviews were conducted within a short period of their scheduled time. The six-month and twelve-month interviews were, on average, conducted on schedule, but variation around the median follow-up time increased as the year-long follow-up period unfolded.

Overcoming high rates of survey nonresponse and study attrition required a wide variety of specialized measures that have often been used with other poor and hard-to-reach populations. Typical of areas undercounted in the Census, the main reentry neighborhoods in Dorchester, Roxbury, Mattapan, and Hyde Park contain both pockets of acute poverty and large black and Latino populations.

Four specific strategies were employed to

[6] The Vera Institute of Justice also conducted a study aimed to follow people in New York City for their first 30 days after release from prison or jail. Only 56 percent of the initial sample completed the study (Nelson, Deess, & Allen 1999).

TABLE 4.
Number of completed interviews and response rates, BRS, April 2015.

	Time Since Release				
	Baseline	1 week	2 months	6 months	12 months
Number of interviews	122	117	113	113	111
Unable to schedule/contact	-	4	8	9	11
Response rate (%)	-	95.9	92.6	92.6	91.0
Median days from release	8	7	64	186	373
S.D. of days from release	40.2	5.9	14.8	20.5	62.6
IQR of days from release	11	3	8	17	29

Note: Release date is respondents' release into the community, which in a few cases was later than release from DOC custody due to a required civil commitment or jail sentence. Does not include two respondents interviewed at baseline who later became ineligible due to a late release date and out-of-state residence. Survey nonresponse includes all those who are un-contacted or unscheduled plus those unreachable through incarceration or hospitalization as a percentage of those eligible to be interviewed. The interview count for two months includes one respondent who was administered a re-incarceration interview in prison. The interview count at six months includes six respondents who were given re-incarceration interviews in prison. S.D. is the standard deviation around the average follow-up time. IQR is the interquartile range between the 25th and 75th percentiles for days from release.

maintain coverage and participation of the respondents. Each data collection strategy aimed to increase coverage and study participation, to be informative about nonresponse and attrition when it did occur, and to provide insight on scaling up the study.

1. Interview incentives. Previous studies found that incentives can increase participation among parolees, and increase retention among low-income respondents (Martin et al., 2001). In a University of Michigan study, parolees were given cash payments for interviews, which the investigators reported as more effective than checks (Harding et al., 2014). Respondents in the BRS were paid for each completed interview. Because respondents at baseline were so close to release, we deferred the first payment until the first follow-up interview. At the one-week interview in the community, respondents thus received two payments, for baseline and follow-up, a strategy that was effective in the Michigan study. Respondents received the $50 incentive at the time of all subsequent interviews, at two months, six months, and one year. Proxy respondents were also paid $50 for their interview. For respondents who were re-incarcerated at the time of a follow-up interview, we deposited $50 into their prison commissary account.

2. Phone check-ins. We also conducted regular phone check-ins with study respondents throughout the year after prison release. Between the baseline, 1-week, 2-month, and 6-month interviews, we phoned respondents every one to two weeks. We checked in by phone about once a month between the 6-month and 12-month interviews. Phone check-ins were used to update the respondents' residential information and to maintain constant contact with respondents to improve study retention. We also asked a few questions at each check-in relating to residential stability, employment, drug and alcohol use, and subjective well-being. Responses to these questions were recorded and form part of the quantitative data collection.

3. Proxy interviews. We expected survey non-response and study attrition to be concentrated among those who moved between residential addresses and group quarters. The Fragile Families study demonstrated the value of proxy interviews with related women who are more strongly attached to households. In particular, women's interviews significantly compensated for high rates of survey non-response among formerly-incarcerated men (Lopoo & Western, 2005). We elaborated this approach by conducting proxy interviews with close family and friends who could also help us locate hard-to-find respondents. The baseline interview in prison obtained a list of contacts to be used to help locate respondents after prison release. Because we expected proxy respondents to provide interesting information about the respondent's family contacts and well-being, we also aimed to conduct at least one substantive interview with a family member or close friend for each focal respondent. At the baseline interview, respondents were fully informed of the retention strategies, and we contacted friends or family members only with respondents' permission.

4. Enlisting community contacts. When conventional retention strategies were exhausted, a professional network of legal agencies and community partners was mobilized to re-establish and maintain contact with the study subjects. For subjects under criminal justice supervision in the community, the Massachusetts Office of the Commissioner of Probation, and in a few cases the Boston Police Department, assisted the research team in locating subjects in the community for interviews. For those who were not under official supervision, we tried to reestablish contact through our connections with a variety of street and community workers operating in the inner-city neighborhoods where study respondents resided.

Finally, although it is not formally a retention strategy, we assess attrition and greatly expand the utility of the survey data by linking to administrative records from the DOC. DOC records provide three kinds of information. First, the records provide complete adult criminal histories of the study participants. Criminal history data was periodically updated throughout the follow-up period after prison release as part of the usual recidivism analysis conducted by the DOC research division. Second, we also obtain information on prison conduct and programming, including participation in treatment programs and 12-step and related programs. This will contribute significantly to data on the conditions of confinement and allow analysis of the association between program participation and post-release health outcomes. Finally, the DOC administers a risk assessment instrument that provides detailed information about the participants' criminal history, education, employment, economic status, family and marriage ties, housing and neighborhood characteristics, and history of alcohol and drug use. These data supplement the survey data as well as indicate the risks—like drug use, crime, and housing insecurity—that are associated with study attrition and criminal recidivism. The availability of social security numbers through the DOC also opens the possibility of linking interview records to an array of social service agencies, in particular to Unemployment Insurance and MassHealth, the state health program for low-income individuals. These records will provide additional evidence on employment and earnings, as well as health care utilization.

Study Content

High rates of study retention combined with a wide array of survey data and linked administrative data yield an exceedingly rich data set for analysis. Survey interviews included

TABLE 5.
Descriptive statistics for measures of childhood experience, crime and criminal justice contact, and official criminal record data, Boston Reentry Study.

	Percentage	Data Source	N
Childhood experiences			
Lived with someone depressed or suicidal	22.7	12 month	110
Parents hit, slapped, beat each other	32.4	12 month	111
Saw someone killed	41.2	12 month	108
Family member with drug problems	56.8	12 month	111
In fights at age 14	91.7	12 month	109
Self-Reported Crime and Criminal Justice Contact after Prison Release			
Any illegal drug use	29.8	All waves	94
Criminal activity	35.9	6 and 12 month	103
Stopped by police after release	61.5	6 and 12 month	104
Parole or probation supervision	61.5	Baseline	122
Criminal Record Data after Prison Release			
Charged for an offense	33.6	BOP	122
Notice of parole/probation violation	24.6	BOP	122
Prison or jail custody after release	22.1	BOP	122

Note: BOP=Board of Probation, the main source of court-based criminal record data in Massachusetts.

new questions and adapted modules from earlier interview studies, notably the Urban Institute Returning Home Study and the Fragile Families Survey of Child Well-Being (LaVigne & Kachnowski, 2003; Reichmann et al., 2001). The data provide detailed information about the experience of community return after incarceration, including high-frequency records on employment, residence, and contact with families and children. To help shed light on the life histories of former prisoners that are unobserved in many other studies, the data include a detailed set of questions on childhood experiences. In addition, post-release surveys ask questions about criminal involvement and criminal justice contact. With data from the Massachusetts Board of Probation, we can also construct official criminal histories for each respondent, and the pattern of re-offending reflected in arrests and new convictions. Such data are useful for the analysis of recidivism and its correlates, and allow researchers to distinguish self-reported offending from official contact through arrests, parole and probation violations, and re-incarceration.

To illustrate the richness of the BRS data, Table 5 reports descriptive statistics on childhood experiences, self-reported crime and criminal justice involvement, and official criminal records. The questions on childhood experiences reveal a deep and sustained exposure to trauma experienced by former prison inmates. Just over a fifth of respondents lived with someone who was depressed or suicidal while growing up. Over 40 percent witnessed someone being killed, and nearly all respondents regularly reported getting into fights in childhood. Respondents were also asked extensively about criminal involvement and drug and alcohol use. Pooling data across all waves, 30 percent of respondents reported using illegal drugs at some point in the twelve months from prison release. Just over 60 percent of the sample reported being stopped by police in the year after release. Finally, linking the survey responses to official criminal records allows a comparison between self-reports and administrative crime data. Questions on criminal activity included items on illegal income, drug use, stealing, assaults, and public disturbances. By these self-report measures, 36 percent of the sample was criminally involved in the year from prison release. A similar proportion of respondents were arrested in the 12 months after release. The official and the self-report measures correlate modestly at .3.

Conclusion

Under conditions of historically high incarceration rates, the Boston Reentry Study provides a unique longitudinal data collection of a cohort of released state prisoners returning to the Boston area. Through four follow-up interviews conducted over a period of a year, the BRS also aimed to provide information not just about recidivism and social reintegration after incarceration; it aimed also to systematically describe the complex and fluid patterns of householding, employment, and family relations that characterize very poor populations who are often tenuously connected to mainstream social roles around which conventional data collections are typically designed.

Because released prisoners are a hard-to-reach population usually under-enumerated in conventional social surveys, a variety of strategies were adopted to improve coverage and sustain a high rate of study participation over the one-year follow-up period. These measures produced extremely high rates of survey response, around 90 percent over four follow-up interviews. The high level of study participation combined with a unique set of survey instruments provide a rich source of information on the experience of leaving incarceration and the life histories of the formerly incarcerated. The surveys, oriented to measuring complex patterns of employment, family ties, and householding, promise an original contribution to our understanding of the process of prison release under the historically novel conditions of very high rates of incarceration in poor communities.

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