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Recent Incarceration History Among a Sheltered Homeless Population

Stephen Metraux
University of the Sciences in Philadelphia

Dennis P. Culhane
University of Pennsylvania, culhane@upenn.edu

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Stephen Metraux, PhD
Health Policy Program
University of the Sciences in Philadelphia

Dennis P. Culhane, PhD
School of Social Work
University of Pennsylvania

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Stephen Metraux, Ph.D. (corresponding author)
Health Policy Program
University of the Sciences in Philadelphia
600 S. 43rd St., Philadelphia PA 19104-4495
s.metrau@usip.edu; 215/ 596 7612 (ph); 215/ 596-7614 (fax)

Dennis P. Culhane, Ph.D.
Center for Mental Health Policy & Services Research
University of Pennsylvania
3500 Market St., 3rd Floor, Philadelphia PA 19104
culhane@mail.med.upenn.edu; 215/ 349-8705 (ph); 215/ 349-8715 (fax)

Abstract

This study examined incarceration histories and shelter use patterns of 7,022 persons staying in public shelters in New York City. Through matching administrative shelter records with data on releases from New York State prisons and New York City jails, 23.1% of a point-prevalent shelter population was identified as having had an incarceration within the previous two-year period. Persons entering shelter following a jail episode (17.0%) exhibited different shelter stay patterns than those having exited a prison episode (7.7%), leading to the conclusion that different dynamics predominate and different interventions are called for in preventing homelessness among persons released from jail and from prison.

Introduction

It is widely assumed that there are increased rates of incarceration among the homeless population (Fischer 1992, Snow, Baker & Anderson 1989). While research has offered explanations for this relationship there is little in the research literature that outlines its empirical dimensions. This study addresses this gap as it examines incarceration histories of persons staying in the public, single adult shelter system in New York City and the associations between incarceration histories and shelter use patterns.

Demographics alone would suggest there to be a substantial overlap among the sheltered and the incarcerated populations. Compared to the overall US adult population, both the homeless and the incarcerated populations are disproportionately male, young and black (Langan and Levin, 2002; Burt et al., 2001; Mauer, 1999; Culhane and Metraux, 1999). Poverty and unemployment are endemic to both populations (Burt et al.,

2001; Western and Beckett, 1999; Lichtenstein and Kroll, 1996). High rates of mental illness and substance abuse have been widely documented in research on both populations (Burt et al., 2001; Freudenburg, 2001; Conklin et al., 2000; Lamb & Weinberger, 1998; Peters et al., 1998). And the convergence of characteristics also manifests itself spatially, as both incarceration and homelessness disproportionately affect persons in low-income urban black neighborhoods (Wacquant, 2000; Culhane et al., 1996; Correctional Association of New York, 1990).

Prior research presents a broad range of findings on rates of incarceration among homeless population samples. Schlay and Rossi (1992) summarized 60 studies on the characteristics and composition of the homeless population from 1981 to 1988. Among these studies, 26 reported findings on incarceration history among the homeless population. Depending on the study, between 8% and 82% of the homeless populations studied reported having been previously incarcerated, with a mean across the studies of 41%. A later review by Eberle et al. (2000) reported that surveys showed prior "rates of arrest and incarceration among the homeless, ranging from 20% to 67%" (p. 35). Burt et al. (2001), drawing on results from a nationally representative sample of the homeless population and a comparison group of non-homeless soup kitchen users, reported that 49% disclosed ever having spent time in a jail and 18% reported spending time in a state or federal prison and that history of incarceration was associated with a significantly higher likelihood of being homeless.

While these findings provide support for the salience of the link between homelessness and increased criminal activity, they provide little detail beyond general, self-reported prevalence of rates of persons who have spent time in jails and/or prisons

and who have records of previous arrests or convictions. Yet despite the vagueness of these findings, researchers point to high rates of criminal activity as evidence of a "criminalization" of homelessness where homeless persons, due to their marginal economic and social status and the public nature of their existence, are more prone to arrests and incarceration for misdemeanors and a range of minor crimes (Barak & Bohm 1989; Snow, Baker & Anderson 1989). The argument that arrests and incarcerations serve as a mechanism of social control over the homeless population has a long history (e.g., Spradley 1970; Bittner 1967) and is consistent with Irwin's (1985) description of "rabble management." Fischer (1992) also points out that, through these incarcerations, the criminal justice system functions as a provider of services such as housing, substance abuse treatment, and mental health care that are ordinarily received from other systems. Finally, shelters, jails and prisons may be part of a larger "institutional circuit" that includes sequential stints in a series of institutions in place of a stable living situation (Hopper et al., 1997).

An alternative viewpoint is that homelessness may be one result of more general readjustment problems that follow release from incarceration. Shelter use among persons released from incarceration is seen here as one outcome related to a problematic community reentry process (Petersilia, 2001; Travis et al., 2001). Metraux and Culhane (2004) found that 11.9% of persons released from New York State Prison to New York City experienced a shelter stay in two years following release, a rate that is comparable to shelter rates among persons released from public psychiatric hospitals (Kuno et al., 2000). Furthermore, of these released prisoners who stay in shelters, 54.4% enter within 30 days of their release from prison (Metraux & Culhane, 2004).

This study outlines the prevalence of incarceration history among a point prevalent sheltered homeless population by matching records from the municipal shelter system in New York City to records of persons released from both New York State prisons and New York City jails. In doing so, it adds to the scant knowledge about the extent of the intersection of homelessness after incarceration. Furthermore, this study examines whether there are associations between these incarceration histories and basic shelter use dynamics, and whether or not these associations can provide support for the criminalization and re-entry explanations.

Data and Methods

The data used in this study came from three administrative databases: records of users and utilization of single adult shelters administered by the New York City (NYC) Department of Homeless Services (DHS); records of all jail discharges (related to convictions) from the NYC Department of Corrections (DOC); and all releases from prison to NYC from New York State (NYS) Department of Correctional Services (DOCS). DHS administers the largest shelter network of any American city, and covers approximately 85% of all NYC shelter beds (NYCDHS 2003; Culhane et al., 1994), while DOC and DOCS operate the second largest municipal jail and third-largest prison systems in the US, respectively.

This study selected all persons who were in a DHS single-adult shelter on December 1, 1997 (i.e., the index date) and matched these records with records of jail and prison discharges for the two-year period preceding this date. Matches of DOCS observations to observations from the DHS data were based on common name, date of

birth, sex, and social security number. The same identifiers, except for social security number, which was unavailable, were used to match DOC data. When a match with either jail or prison was determined, the matching record was appended onto the corresponding DHS record. In the event of matches with multiple incarceration records, the most recent jail and prison record was retained. Jail episodes that led to transfers to prison were considered part of the prison episode.

Descriptive and multivariate regression techniques were used to assess 1) the extent to which persons in the DHS single adult shelter system on a specific night had recent histories of incarceration; 2) how incarceration histories intersected with shelter use patterns; and 3) whether there are differences in these areas between persons who have been jailed and persons who have been imprisoned. The multiple regression analyses focused on four dependent measures: 1) number of shelter stays prior to the instant stay; 2) the length of instant stay subsequent to the index date; 3) the occurrence of a subsequent shelter stay; and 4) the time between release from incarceration and shelter admission.

Three different regression techniques were applied to model these outcomes. For the previous shelter stays regression model, a Poisson distribution was fitted to accommodate the discrete, highly skewed nature of count variables such as this (Allison, 1999).[1] Ordinary least squares regression was used to examine, for the entire shelter

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[1] A shelter "stay" is here considered to be a span of shelter utilization that both followed and preceded a thirty day absence from a shelter (Wong, Culhane and Kuhn 1997; Culhane and Kuhn 1998; Piliavin et al. 1996). By using this thirty day exit criterion, a stay hereby precedes an extended time period away from shelters and assumes that, after an exit, alternate living arrangements have supplanted, not just provided temporary relief from, shelter use. However, leaving a shelter may not mean leaving homelessness, as, depending on the living situation and the definition of homelessness used (Cordray and Pion 1991), a person exiting a shelter stay may still, by virtue of subsequently living "on the streets" or in "doubled up" situations with other households, be considered homeless.

population, the length of the instant stay from the index date onward,[2] and the incarceration to shelter gap for those among the shelter population with an incarceration history. Finally, a Cox proportional hazards regression model was fitted to assess the association of various factors on the hazard of incurring another shelter stay subsequent to exiting the instant stay, given that the majority of persons in the study group will be "censored" (i.e., not experience a subsequent shelter stay) (Allison, 1995). All data management, matching, and analyses were performed using SAS statistical software, version 8.02.

Results

Table 1 presents descriptive demographic and shelter utilization results for the overall point-prevalent shelter population and the subgroups in which jail and prison releases occurring up to two years prior to the index date. Altogether, 23.1%, just less than one quarter, of the 7,022 persons staying in the single adult shelter system that night had a record of an incarceration. This included 17.0% with a jail release and 7.7% with a prison release. These two groups were not discrete, as 113 persons or 1.6% of the overall population (21% of the previously imprisoned population and 9.5% of the previously jailed population) had been incarcerated in both jail and prison.

Shelter utilization is represented by three measures: the number of DHS shelter stays (prior and instant); the prospective length of the instant stay (i.e., the duration of the shelter stay after the index date); and whether or not a repeat stay occurred within one

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[2] The length of the instant shelter stay is measured prospectively from the index date (December 1, 1997) to reduce the extent to which the group differences are an artifact of incarceration history. As was already explained, to be considered to have an incarceration (prison or jail) history, a person must have experienced an incarceration within the two-year period prior to the index date. Depending on the release date and the length of incarceration, time spent in jail or prison reduces the opportunity to accrue an extended shelter stay prior to the index date (as one cannot simultaneously be incarcerated and sheltered). To avoid confounding, the stay length measure only includes time accrued after the index date.

year from exiting the instant stay. Summarizing these measures, when compared to the overall group the prison subgroup had about the same number of stays but their stays were shorter, while the jail subgroup also had shorter stays but stayed in shelters more frequently both before and after the instant stay.

There were also significant demographic differences among the subgroups and the general shelter population. Among a predominantly black and Hispanic shelter population, the prison subgroup featured a higher proportion of persons of Hispanic ethnicity, while the jail subgroup contained a higher proportion of persons of (non-Hispanic) black race. The single adult shelter population was 81.5% male, and both the prison and jail subgroups had even higher proportions of males. Both subgroups were significantly younger than the general shelter population.

These descriptive characteristics were fitted into three multivariate models to estimate the associations of jail or prison release on three measures of shelter utilization, controlling for demographic and shelter utilization measures. The first set of results was from a Poisson model regressing on the number of previous shelter stays experienced by each person in the study group. Although being incarcerated during this period, especially in prison, reduced the opportunity for persons to accrue shelter stays, having a history of jail release showed a highly significant association with a greater number of past shelter stays, while history of prison release had a non-significant association and no negative effect. The more days accrued during the part of one's current stay that occurred prior to the index date, the further opportunity to accrue stays is reduced, and this was borne out by a significant, negative association between this measure and number of past shelter stays.

In the second model, which used ordinary least squares regression on the number of days in the instant shelter stay that occurred after index date, a prison stay was significantly associated with a shorter shelter stay, while a jail stay had a non-significant association. The number of past shelter stays was significantly associated with a reduced length of shelter stay, and accruing more shelter days prior to the index date was associated with a longer stay after this date.

The final model in Table 2 was a Cox regression model estimating the association of the covariates with the hazard of returning for a subsequent shelter stay in the year following exit from the instant shelter stay. Here both jail and prison history had significant ($p<.05$) associations with the dependent variable, but while a jail stay history was associated with an increased hazard (by 15%) of a repeat shelter stay, having had a prison stay history was associated with a 20% decrease in the hazard of experiencing a repeat shelter stay. The higher the number of past shelter stays, the greater the hazard for experiencing a subsequent stay, while the number of days in the instant stay (total stay length) had a significant but small incremental association with a decreased risk of a subsequent shelter stay (0.01% reduction in hazard per shelter day).

Tables 3 and 4 focused on the incarceration episodes of the 1,622 persons in the study group and demonstrate further differences related to jail and prison histories.[3] Table 3 shows that, unsurprisingly, prison incarcerations on average lasted considerably longer than jail incarcerations. But, in looking at the "gap" between the end of incarceration and the start of the index shelter stay, the prison to shelter gap, on average, was considerably shorter than the jail to shelter "gap." Over half (54.3%) of the former

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[3] The 113 instances where both jail and prison histories preceded a shelter stay were grouped by whichever incarceration episode was closest to their shelter entry.

lasted one week or less, compared to 32.9% of the latter. The median gap length (not shown on the table) for the jail gap (64 days) was also considerably longer than that for the prison gap (5 days).

Table 4 presents the results of an ordinary least square regression model that assesses whether the association between prison stay and shorter incarceration-shelter gap remained after controlling for the differences in length of the incarceration episode (as well as for race/ethnicity, age and sex). After controlling for these covariates, prison stay was still associated with a considerably shorter gap length compared to jail stay, while length of incarceration falls just outside of being significant at the .05 level.

Discussion and Conclusion

This study, which matched prison and jail records to records of individuals staying in a municipal homeless shelters in New York City on December 1, 1997, found that 23.1%, or nearly one-quarter of the study population, had been incarcerated in a New York State prison or a New York City jail within the previous two years. This overall rate, when broken down by incarceration type, has 17.0% experiencing a jail episode and 7.7% experiencing a prison episode. These rates are almost certainly understated due to limitations related to the relatively short time period studied; the lack of data on incarcerations outside of NYSDOCS and NYCDOC; and the undetermined number of missed matches due to inconsistent identifying information being collected by the different systems. Nonetheless, the findings indicate that incarceration affects a substantial minority of the single adult sheltered population and that criminal justice issues, whether recognized or not, figure prominently among the homeless milieu.

The extent to which findings like this are generalizable is always a matter of concern. As the largest city in the US, New York City also has the largest shelter system. However, when taken as a proportion of its population, New York City's shelter population falls into the middle of a range of other different sized urban jurisdictions (Metraux et al, 2001). With respect to its jail population, New York City ranks second in overall size to Los Angeles and, when viewed as a proportion of its overall population, ranks behind numerous other cities (Harrison & Karberg 2003). Similarly, although New York State has one of the largest inmate populations in the US, its rate of incarceration ranks it among the middle of the states (US Department of Justice 2002). Other dynamics specific to individual cities are more difficult to quantify, but there is no indication that factors particular to New York City would preclude these findings from being considered more generally.

The distinct patterns of shelter use associated with prison releases and jail releases each have different implications for developing effective interventions to ameliorate homelessness upon release from incarceration. Among many of the 7.7% of the study group who had a prior prison stay, shelter use appears to have been related to reentry issues. History of a prison release in the two years prior to the index date was associated with a shorter instant shelter stay, a reduced hazard of experiencing a subsequent stay, and, compared to those released from jails, a shorter "gap" between incarceration exit and shelter entry. The finding that 61.8% of those in the study population who were released from prison commenced their instant shelter stay within thirty days of release is consistent with findings that these thirty days represent a critical time period when

released prisoners are most vulnerable to a variety of negative outcomes (Nelson et al., 1999; Travis et al., 2001).

Thus shelter stays among persons released from prison appear more likely to be of a transitional nature, rather than part of a long-term pattern of homelessness. However it is unclear whether the long-term outcomes following this transition are more likely to include eventual economic and residential stability or less desirable outcomes such as reincarceration. Other research using this data shows shelter use, among a cohort of released prisoners, to be associated with a modest increase in the hazard of returning to prison (Metraux & Culhane, 2004). Conversely the short time period between prison release and most subsequent shelter use suggests that housing assessments prior to release could identify many of those who will be at risk for homelessness. Housing, if made available upon prison release either on a transitional or a permanent basis, might preclude the need for homeless services among persons released from prison, as well as facilitate the more general community reentry process (Osher, Steadman & Barr, 2003).

Among the 17.0% in the study group entering the shelter system from a recent jail stay, a different shelter use pattern emerges. Compared to the overall study group, this subgroup tended to have a more extensive history of prior shelter stays and a greater hazard for experiencing a subsequent shelter stay. Not only did shelter stays follow a more prolonged, episodic pattern, but the incarceration stay was typically of a relatively brief duration, with 71.8% staying in jail for thirty days or less. This sequential pattern of shelter and jail use points to a more prolonged pattern of residential instability.

This pattern offers support, albeit tentative, for other broader paradigms describing the similar functions that jails and shelters play among extremely poor

populations. In this context, these serial jail and shelter stays alternately represent: pieces

of an "institutional circuit" that acts as a surrogate for stable housing (Hopper et al.,

1997); a means for "rabble management" in which jails and shelters exercise social

control over an undesirable population (Irwin, 1985); and a process of socialization into a

long-term, deviant lifestyle described as "a life sentence on the installment plan"

(Spradley, 1970; also Grunberg & Eagle 1990). Kuhn & Culhane (1998) has found that

homeless persons with such episodic patterns of shelter use tend to be younger and have

higher rates of mental illness and substance abuse when compared to the overall

population of single adult shelter users. Interventions suited for this group would require

a more structured residential treatment format, although supported housing programs

have also reported success with persons who have such institutional stay patterns

(Tsemberis, 1999).

To summarize, jail and prison releases were each associated with different shelter

stay patterns and each type of incarceration calls for a different intervention approach. In

making these conclusions, this study has emphasized the dynamics between shelters and

jails and prisons, instead of the individual characteristics of the persons in the study

group that are usually the focus of such studies (Snow, Anderson & Koegel 1994).

Indeed, the subgroups with jail and prison records are likely to have overlapping

constituencies who share similar individual characteristics, and the extent to which this is

so further highlights the different impacts of jail and prison on homelessness following

release. Instead, an institutional focus underscores the roles that carceral institutions play

in subsequent patterns of homelessness, and their potential roles as intervention points.

Data limitations preclude a more in depth look at these dynamics and create an agenda for future research. The interaction of shelters, jails and prisons with other institutional dynamics is one such area. Mental health and substance abuse services, as well as income support and other poverty amelioration services, have all figured prominently in proposed interventions for sheltered and formerly incarcerated populations and may provide additional insight into understanding and intervening in these different shelter use patterns. Furthermore, data on already existing community supervision services that the criminal justice system provides, and particularly probation and parole, could show how they play a role in either preventing or facilitating post-incarceration shelter use and ways to render these services more effective. In the meantime the need for different approaches to preventing homelessness upon prison release and jail release is apparent, as is the potential for such interventions to substantially reduce the demand for shelter among single adults.

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Table 1 – Persons in NYC municipal single adult shelters on December 1, 1997: Incarceration, shelter use and demographic characteristics.

	Overall Sheltered Population (n=7,022)	Sheltered Pop. w/ Prison History (n=539)	Sheltered Pop. w/ Jail History (1) (n=1,196)
Incarceration			
Any History (2)	23.1%	100.0%	100.0%
Jail (1)	17.0	21.0	100.0
Prison	7.7	100.0	9.4
Shelter Stay History^^^			
1st Stay	40.4	37.9	26.1
1-5 Stays	42.6	45.5	46.3
6-10 Stays	11.4	12.2	17.6
Over 10 Stays	5.6	4.4	10.0
Days in Instant Shelter Stay (after Dec. 1) (3) * ^^^**			
1-7 Days	5.4	5.7	6.9
8-30 Days	9.7	12.8	11.4
31-180 Days	41.9	48.1	41.7
181-365 Days	20.5	19.6	22.2
365+ Days	22.5	13.9	17.8
Subsequent Shelter Stay (4) ^^^	26.9	25.2	35.4
Race/Ethnicity * ^^^**			
Black (non-Hisp.)	60.4	56.2	65.1
White (non-Hisp.)	13.6	8.9	9.0
Hispanic	20.6	31.9	22.5
Other/Unknown	5.4	3.0	3.3
Male * ^^^**	81.5	92.6	87.8
Age * ^^^**			
18-25	5.8	3.2	5.8
26-35	23.1	35.8	31.4
36-45	35.8	41.6	41.6
46-55	23.0	15.6	17.7
56+	12.2	3.9	3.5

*** - Appropriate tests of significance (chi-square and t-test) indicates significant differences (p<.001) between the prison subgroup and the rest of the study group.
^^^ - Appropriate tests of significance (chi-square and t-test) indicates significant differences (p<.001) between the jail subgroup and the rest of the study group.
1 - Does not include episodes where persons were transferred directly from jail to prison.
2 - Incarceration (prison and/or jail) histories are limited to releases from NYS prisons and NYC jails within the two-year period prior to December 1, 1997.
3 - For all persons in the study group, shelter stays are truncated in this measure to begin on December 1, 1997 due to prison and jail subgroups having less opportunity to accrue pre-December 1 shelter days given their incarceration histories.
4 - Subsequent shelter stay occurred either within one year after instant stay exit or, if this exit occurred in 2001, before December 31, 2001.

Table 2 – Regression results from three models on shelter utilization measures for persons staying in NYC municipal single adult homeless shelters on December 1, 1997.

	Past Shelter Stays (Poisson)		Partial Length of Instant Shelter Stay – Post December 1 (OLS)		Hazard for Repeat Shelter Stay (Cox Regression)	
	Coefficient Estimate (CI)		Coefficient Estimate (CI)		Hazard Ratio (CI)	
Incarceration						
Prison Release	-0.10	(-0.23, 0.01)	-39.6	(-68.6, -10.6) **	0.80	(0.67, 0.95) *
Jail Release	0.47	(0.40, 0.55) ***	-5.9	(-28.7, 15.0)	1.15	(1.02, 1.28) *
Shelter Utilization						
Number of Prior Stays	(not in model)		-3.0	(-5.5, -0.4) *	1.12	(1.10, 1.13) ***
Length of Stay (total stay)	(not in model)		(not in model)		0.9999	(-0.99, 1.00) *
Length of Stay (pre 12/1)	-0.0003	(-0.01, 0.00) ***	0.21	(0.20, 0.23) ***	(not in model)	
Race/Ethnicity						
Black (non-Hisp.)	(reference category)		(reference category)		(reference category)	
White (non-Hisp.)	-0.57	(-0.68, -0.46) ***	0.7	(-22.6, 24.0)	1.00	(0.87, 1.15)
Hispanic	-0.31	(-0.39, -0.22) ***	3.7	(-15.9, 23.4)	0.98	(0.87, 1.10)
Other/Unknown	-1.26	(-1.52, -1.01) ***	-13.6	(-48.4, 21.4)	0.74	(0.57, 0.95) *
Male	0.46	(0.36, 0.56) ***	-25.1	(-45.1, -5.0) *	1.54	(1.34, 1.77) ***
Age	0.02	(0.01, 0.02) ***	3.5	(2.8, 4.2) ***	0.993	(0.99, 1.00) **
Intercept	-0.13	(-0.29, 0.03)	90.7	(55.5, 125.8)		
Scale	2.018					

CI indicates 95% confidence interval
* $p < .05$; ** $p < .01$; *** $p < .001$

Table 3 – Length of most recent incarceration episodes and length of time between the end of the incarceration episodes and the start of the corresponding shelter stays associated with persons in the NYC single adult shelter system on December 1, 1997 with an incarceration record in the 2-year period prior to this date.

	All Incarcerations (n=1,622)	Prison Episodes (n=469)	Jail Episodes (n=1,153)
Length of Incarceration			
1 day	6.3%	0.0%	8.9%
2 – 7 days	30.2	0.0	42.4
8 – 30 days	14.9	1.1	20.5
31 – 365 days	29.1	33.5	27.4
Over 366 days	19.5	65.5	0.9
Length of Incarceration Release to Shelter Entry (Gap)			
0 – 1 day	26.9	37.5	22.6
2 – 7 days	12.2	16.8	10.3
8 – 30 days	9.7	7.5	10.6
31 – 180 days	22.9	17.9	25.0
181 – 365 days	16.2	11.7	18.0
366 – 730 days	12.0	8.5	13.4

Where both jail and prison histories preceded one person's shelter stay (n=113), only the incarceration episode that was closest to shelter stay was included.
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Table 4 – Regression model for assessing the effects of incarceration type[1] on the incarceration to shelter "gap" length for persons in NYC single adult shelter system with an incarceration record in 2-year period prior to December 1, 1997.[2]

	Coefficient Estimate (CI)	
Days Incarcerated	-0.02	(-0.04, 0.0001)
Incarcerated in Prison	-31.0	(-54.0,-8.1) ***
Intercept	178.0	(134.6, 221.5) ***

CI indicates 95% confidence interval
* p < .05; ** p < .01; *** p < .001
1 - "Incarcerated in Prison" is as compared to "Incarcerated in Jail" as the reference group
2 - These results control for demographic variables (race/ethnicity, age, sex) whose results are not included here and are all non-significant.