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Motivation for Treatment Among Women Offenders in Prison-Based Treatment and Longitudinal Outcomes Among Those Who Participate in Community Aftercare

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Abstract

Participation in aftercare may reduce risk of recidivism among women offenders with substance use problems following their release to the community. This study examines motivation to participate in aftercare among women offenders and whether their participation in both in-custody and aftercare treatment reduces their risk of recidivism. Surveys were conducted with women (N = 1,158) in prison-based substance abuse treatment programs. Return-to-prison was examined among participants in community-based aftercare (N = 1,182) over 12 months following treatment discharge. Higher treatment motivation was associated with child welfare involvement, prior treatment, and use of “harder” drugs; ethnic minority women had lower treatment motivation compared with White women. Participants who completed the aftercare program, or who had longer treatment duration, and those who had participated in an in-prison program prior to parole had reduced risk of recidivism. Study findings suggest the value of community aftercare for women offenders, particularly when combined with prior in-prison treatment.

Keywords

aftercare; recidivism; residential drug treatment; treatment motivation; women offenders

Over 11,000 women are incarcerated in California, which is the second largest population of women inmates in the United States, after Texas (CDCR 2010). Yet because women constitute only 6% of inmates in California prisons and 11% of parolees within the state, their service needs are often eclipsed by those of the far more numerous male offenders. Men and women offenders also present a different profile of criminal behavior involvement. Among California inmates, a greater proportion of women than men have been convicted of property-related crimes (34.6% vs. 18.3%) or drug-related crimes (24.3 % vs. 16.5%), as opposed to violent crimes (35.2% vs. 56.9%; CDCR 2010). Thus, women have different pathways to criminal behavior, and typically have treatment and service needs that stem from their substance use and associated problems (Covington & Bloom 2006; Pelissier & Jones 2005).

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TREATMENT NEEDS OF FEMALE OFFENDERS

Prior studies of women offenders have shown that their treatment/service needs are complex, given their multiple problems and the barriers they face in obtaining needed services, both in correctional and community settings (Messina, Burdon & Prendergast 2003; Alemagno 2001; Freudenberg et al. 1998; Owen 1998; Prendergast, Wellisch & Wong 1996). In particular, substance-abusing women offenders have treatment/service needs related to their mental and physical health (Velasquez et al. 2007; Messina & Grella 2006); exposure to abuse, trauma, and victimization as children and adults (Grella, Stein & Greenwell 2005; Mullings, Hartley & Marquart 2004); parenting and family status (Grella & Greenwell 2006); and employment and housing status (Adams, Leukefeld & Peden 2008). Moreover, incarcerated women have significantly higher rates of psychiatric disorders than men (Binswanger et al. 2010; Sacks 2004; Teplin, Abram & McClelland 1996).

Despite their complex treatment needs, some research has shown that women in prison receive fewer services than their male counterparts (Oser et al. 2009) and that they face additional barriers to accessing services in the community (Jordan et al. 2002; Staton, Leukefeld & Logan 2001). Further, women offenders face numerous stressors upon their re-entry to the community (Schram et al. 2006; Freudenberg et al. 2005). These include their re-exposure to social networks and relationships that may precipitate their relapse to substance use, criminal activity, and other associated risky behaviors (Millay et al. 2009; Knudsen et al. 2008; Staton-Tindall et al. 2007; Falkin & Strauss 2003) and lack of access to housing and employment (McLean, Robarge & Sherman 2006).

A review of the needs of women on parole by the Little Hoover Commission (2004: ix), a nonpartisan state policy commission in California, recommended the development of “community-based re-entry programs to reduce recidivism among women offenders, improve public safety, and reduce public costs.” Moreover, the Commission recognized that the prevailing correctional system was not designed to address the service needs of women. Other reviews of the treatment needs of women offenders have supported treatment approaches that directly address the needs of women (Moloney, van den Bergh & Moller 2009; Lewis 2006) and the provision of a continuum of prison- and community-based services (Adams, Leukefeld & Peden 2008), including housing assistance, vocational training, and support for family reunification.

MOTIVATION FOR TREATMENT AMONG WOMEN OFFENDERS

In addition to gender differences in treatment needs, men and women offenders differ in their motivation for and utilization of treatment (Grella & Joshi 1999). One study of inmates in prison substance abuse treatment showed that more prior arrests were associated with more prior treatment participation among men, but not women, whereas more medical hospitalizations were associated with increased women’s prior treatment participation (Staton-Tindall et al. 2009). A study of federal inmates found that higher scores on treatment motivation and less education predicted in-prison treatment entry for both men and women, although having a history of childhood physical abuse and being unemployed were uniquely associated with treatment entry for women (Pelissier 2004). In another study of offenders in prison-based treatment, women had a greater recognition of their substance use problems than men, but less self-efficacy that would help them to remain abstinent in high-risk situations (Pelissier & Jones 2006).

Women and men offenders also differ in their participation in aftercare. One study showed that a greater percentage of men went into aftercare upon parole, but that women who entered into aftercare had longer retention than did men (Messina et al. 2006). There is limited research on the factors that influence women’s decisions whether to participate in

aftercare following their parole to the community. This study aims to explore in more depth women's motivation to participate in community aftercare among those who are eligible to do so.

RECIDIVISM AMONG WOMEN OFFENDERS

Although some research has been conducted on the short-term outcomes of women parolees following their release to the community (Messina, Burdon & Prendergast 2006), most such studies have examined the effects of participation in treatment while incarcerated (Messina & Prendergast 2001). For example, a study of a New York prison-based therapeutic community (TC) program showed that women in the TC treatment group had significant reductions in recidivism compared with women who participated in other types of prison programs (Wexler et al. 1990). Findings from an evaluation of the Forever Free Program in California, which provided cognitive-behavioral treatment designed for women within a prison TC program, compared program participants with a no-treatment comparison group (Prendergast, Hall & Wellisch 2002). The Forever Free treatment participants had significantly fewer arrests, less drug use, more employment, and a longer time to reincarceration as compared with the nontreatment group (Hall et al. 2004).

In an experimental pilot study, participants in a prison-based treatment program that used a manual-guided "gender-responsive" treatment approach¹ (Covington 2008) were compared to participants in a standard prison TC treatment program (Messina et al. 2010). Women in the experimental condition had significantly lower reincarceration rates 12 months after parole to the community as compared with participants in the TC program (31% vs. 45%, respectively). Moreover, experimental participants were more likely to participate in aftercare following their parole to the community. Overall, a recent systematic review that pooled results from six studies showed that women who participated in prison-based substance abuse treatment reduced their risk of recidivism by about one half compared with women who did not receive any treatment (Tripodi et al. 2011). However, the effects of participation in aftercare, both with and without prior in-prison treatment, have not yet been examined.

FEMALE OFFENDER TREATMENT AND EMPLOYMENT PROJECT

In 1998, the California State Legislature passed a bill authorizing the CDCR to establish the Female Offender Treatment and Employment Program (FOTEP).² The goal of the project was to enable the successful community reintegration of women parolees with a history of substance abuse problems. FOTEP treatment programs were established in ten counties throughout the state through contracts with three well-established providers of treatment to women offenders. Enrollment is voluntary and priority is given to parolees who have successfully completed an in-prison treatment program, although approximately 30% of participants enter directly from the community without prior in-prison treatment. Eligibility is determined by prison, parole, and treatment program staff and is based on assessment of need for and ability to participate in residential drug treatment (i.e., individuals with severe mental disorders or who have a history of violent behavior and/or child abuse may be excluded from participation). The core components consist of residential drug abuse treatment for six to 15 months, comprehensive case management, vocational services, and parenting-related services.

¹Bloom, Owen & Covington (2003) define gender-responsive treatment as "creating an environment through site selection, staff selection, program development, content, and material that reflects an understanding of the realities of women and girls and that addresses the issues of the participants" (p. 75).

²Senate Bill 491, Chapters 500 and 502, Statutes of 1998, California Penal Code Section 3054.

The FOTEP program was cited by the Little Hoover Commission ([2004]) report as an exemplary model of an aftercare program that is designed to provide a system of continuing care for women offenders from prison-based treatment to community-based aftercare, with the goal of improving their reintegration to the community and long-term outcomes. An outcome study conducted with a subsample of FOTEP participants and a comparison group of eligible nonparticipants who had received prison-based treatment (total N = 500) found that at 12 months following parole, FOTEP participants had lower rates of alcohol and other drug use and incarceration, and had higher rates of being employed and living with their children. Moreover, FOTEP participants were more likely than the comparison group to have received needed social, treatment, and health services and to have participated in vocational and job-seeking activities and in 12-Step groups. They also expressed high levels of satisfaction with the program (Grella 2006).

Although the FOTEP project was designed to specifically address the treatment needs of women offenders, it is unclear whether eligible women are indeed motivated to participate in continuing care following their release from prison. In addition to providing women with needed services, the ultimate goal of the project is to reduce their risk of recidivism. The current study aimed to examine these two facets of the project. Specifically, we examined: (1) the prerelease treatment attitudes and plans of women who were the intended participants of the FOTEP project, including their motivation for community aftercare treatment; and (2) the outcomes of project participants, specifically how their treatment participation influenced risk of recidivism over 12 months following treatment discharge. We hypothesized that treatment motivation would vary by several indicators of severity (e.g., drug use, child welfare involvement) and that risk of recidivism would be reduced for treatment participants who had greater treatment exposure, including both in prison and in aftercare.

METHODS

The study research questions were addressed in the following ways: (1) a survey was conducted of women participating in prison-based treatment programs; and (2) survival analyses were done of 12-month recidivism among FOTEP participants using state administrative data. Methods for each are described below.

In-Prison Survey

Surveys were conducted at seven in-custody treatment programs at four California prisons for women from April to June 2007 (N = 1,158). The overall refusal rate was 8.8% across the seven sites (ranging from 5.0 to 12.4%). Surveys were scheduled in coordination with program staff at each of the sites and were administered within the context of treatment programming to groups ranging in size from ten to approximately 100. Research staff read out loud the purpose of the survey and instructions to the participants. Most surveys were self-completed, although research staff verbally administered the surveys for participants who requested it. Participants were not paid for their participation in the survey, consistent with CDCR policy regarding research conducted with inmates. Participants were advised that their participation in the study was voluntary and no identifying information was collected; verbal informed consent was obtained for study participation.

Survey instrument—The survey was designed to be a brief assessment of participants' willingness and plans to participate in aftercare, and the factors influencing their decision. Treatment motivation (Simpson & Joe 1993) was assessed by 20 items regarding desire for help, problem recognition, and treatment readiness, consistent with the Stages of Change

model (Prochaska & DiClemente 1986). A sum of all items (range: 0 – 40; Mean [SD] = 30.3 [8.6]) was used in the multivariate analysis (described below).

Analyses—Analyses of survey data consisted of descriptive statistics of participant background characteristics, aftercare plans, and factors influencing aftercare participation. Multivariate linear regression was used to model the factors associated with motivation for aftercare treatment. Because of its skewed distribution, the dependent variable was transformed into quintiles.

Recidivism Analyses

Data from the CDCR Offender Based Information System (OBIS) was obtained on all FOTEP participants who were admitted from 1/2005 through 6/2007. Unique identifiers of FOTEP participants, obtained from the treatment services branch of CDCR, were directly matched with administrative data on all incarceration events of participants. Data on sociodemographics were also obtained from OBIS. These data were then merged with data obtained from CDCR on participation in FOTEP (i.e., dates of admission and discharge and discharge status) over this period.

Variables—The dependent variable included any return to prison (for parole violation or a new charge) in California over 12 months. Predictor variables were limited to those included in the administrative database (OBIS). Independent variables of theoretical interest included those pertaining to treatment received either while incarcerated or in the aftercare (FOTEP) program. These include: FOTEP completion status (1 = completion, 0 = noncompletion), time in FOTEP treatment (in days), and participation in an in-custody treatment program prior to parole (1 = yes, 0 = no). Variables pertaining to participant characteristics that have been associated with recidivism in prior analyses were also included, such as demographic characteristics (e.g., age, race/ethnicity) and type of primary offense associated with most recent incarceration (i.e., property, drug-related, violent, other). Several other variables were included as they controlled for structural or system-level factors that may influence risk of recidivism; these include: parole region (as availability of treatment options is known to vary across regions of the state); commitment type (i.e., felon or civil addict; the latter are mandated to treatment without receiving a felony conviction and typically have less prior criminal justice involvement); and FOTEP cohort (i.e., fiscal year of admission, as maturation of the program may have influenced observed outcomes).

Analyses—Two methodological issues were taken into consideration in analyses of return-to-prison (RTP). First, RTP was anchored to the date of discharge from FOTEP treatment, rather than the date of parole from prison. Examining RTP from the date of parole would produce underestimates, given that FOTEP participants were residing in community-based residential treatment programs (although these are not locked facilities). In only about 1% of cases were participants discharged from FOTEP due to an arrest, which would presumably prompt an immediate RTP. Thus FOTEP discharge and RTP represented independent events in nearly all cases.

Second, the RTP analyses controlled for time at risk for the event. That is, participants were selected for the survival analysis who had an equivalent amount of time (12 months) following discharge from FOTEP, during which they could potentially return to prison. In this way, all cases had the same opportunity to experience the event (i.e., recidivism). Cases who were outside of this time frame (i.e., either still in treatment or had less than 12 months following release) were excluded from these analyses, as were cases who were missing data on completion status or who were discharged for external factors unrelated to treatment completion (e.g., parole completion, medical discharge).

Time to recidivism was evaluated with survival analysis, using fixed covariates as predictors. The Cox proportional hazards model was used, which is part of the family of models known as generalized linear models (GLM). These models incorporate censored data in modeling the rate of survival over time. Censored data occur when a subject does not experience the “event” (i.e., return-to-prison) during the specified time periods under examination. The Cox model incorporates both censored and noncensored data into the maximum likelihood estimation of the parameter estimates. The overall model is evaluated with a likelihood ratio test, after which individual predictors are examined using a Wald test. All fixed covariates were entered simultaneously to examine their unique contributions. In addition, changes in the hazard rate (HR) for a unit of change of continuous variables, and in the relative risk for dichotomous measures, were examined, along with 95% confidence intervals for these estimates.

RESULTS

In-Prison Survey

Approximately two fifths (41%) of the survey respondents were White, about one quarter each were Hispanic and African American, and the remainder (9%) were of “other” racial/ethnic groups. The average age of participants was 36.6 (SD = 8.7). Relative to the total inmate population of women in California in 2007, White women were somewhat overrepresented and Hispanic women were underrepresented in the survey sample (although average age was the same; CDCR 2010). About one third of the sample did not have any dependent children, 39% had one or two children, and 28% had three or more children. Approximately one fifth of the sample (19%) had at least one child who was currently in the child welfare system.

With regard to previous incarcerations, 45% had only been incarcerated one time (including the present), 28% had two to three incarcerations, and 27% had been incarcerated three or more times. One third of the sample had never been in drug treatment (prior to their current episode), one quarter had one previous treatment episode, and the remainder (42%) had been in treatment two or more times. At the time of the survey, about one third (32%) had been incarcerated for less than six months, about two fifths (42%) had been in prison between six months and one year, and the remainder (26%) for more than one year. A majority of the sample (59%) had six months or less until their expected date of parole.

Respondents were asked to rank the three most important factors (out of a list of 14) that would make it more likely that they would enter into aftercare. Factors ranked most highly were (with % of respondents ranking the item in the top three influences on their decision): early discharge from parole (50%),³ availability of employment services (34%), overall quality of the program (33%), availability of family services (25%), location of the program (23%), length of the program (21%), ability to have children with them while in treatment (20%), recommendation of parole agent (17%), and availability of mental health services (14%).

When asked about their plans regarding participation in aftercare, about one third (32%) of the respondents indicated that they intended to enter FOTEP. Another 21% indicated they planned to enter a residential treatment program for offenders (that was not gender-responsive), and 13% planned to enter an outpatient treatment program combined with sober living housing. About 7% of the sample indicated they would enter into treatment at a later

³Senate Bill 1453, enacted in 2007 as Section 2933.4 of the California Penal Code, allows eligible participants who successfully complete in-custody substance abuse treatment and who complete 150 days of residential continuing care to be discharged from parole. This option was not in effect at the time of the survey.

date, and 21% did not intend to go to treatment at all. These estimates of intention to enter treatment are somewhat higher than actual show-rates; according to CDCR (2009), approximately 55% of female offenders who complete in-prison treatment enroll in some continuing care option within 180 days of discharge from prison, although rates are considerably higher for civil addicts (approximately 80%) than felons, presumably because their treatment participation may be mandated as a condition of parole.

A multivariate linear regression model was used to predict the treatment motivation score. As seen in Table 1, higher treatment motivation was associated with having a child in the child welfare system, having been in prior drug treatment, and using “harder” drugs (i.e., cocaine, methamphetamine, opiates) rather than marijuana or alcohol, as one’s primary substance. Lower motivation for treatment was associated with being African American, Hispanic, or of “other” race/ethnicity, as compared with being White; and with parole region. Individuals who had been incarcerated more than once were marginally more likely to have higher motivation for treatment.

Recidivism Analyses

Overall, 36.8% of FOTEP participants returned to prison within 12 months of FOTEP discharge. A majority of all cases were returned to custody for a parole violation (64%), 22% were returned with a new term, and the remainder (14%) returned pending parole revocation. Table 2 shows the RTP rates for the 12 months following FOTEP discharge by participant characteristics (N = 1,182). Individuals in the younger age groups had proportionately higher rates of RTP, compared with those in the older age groups. A larger proportion of individuals whose primary commitment offense was property-related crime returned to prison, whereas a smaller proportion of those with drug-related offenses returned to prison, as compared with individuals with violent or other types of offenses. A significantly higher proportion of felons returned to prison, compared with civil addicts. Two aspects of treatment participation were strongly associated with RTP: smaller proportions of individuals who had participated in in-custody treatment prior to FOTEP returned to prison, as well as those who had completed FOTEP treatment, compared with noncompleters. There were no significant differences in RTP by race/ethnicity, region, or FOTEP cohort.

Table 3 shows the hazard rates and associated confidence intervals from the survival analysis on RTP at 12 months following discharge from FOTEP. There is a direct linear relationship between time in treatment and risk of RTP, with increasing amounts of time in treatment associated with decreasing risk of RTP. Other variables that were associated with RTP were region of parole, with participants in Region III (Los Angeles) about 25% less likely to RTP than those in Region I (Central Valley). Further, individuals who participated in an in-custody treatment program prior to their admission to FOTEP were about 25% less likely to RTP compared with those who had not.

In a separate model (data not shown), a dichotomous variable indicating completion status was entered instead of time in treatment (because completion and time in treatment were highly correlated). Individuals who completed FOTEP treatment were about 80% less likely to return to prison within 12 months as compared with noncompleters (CI: 0.13, 0.28; $p < .0001$). Kaplan-Meier survival curves for completers and noncompleters are shown in Figure 1.

DISCUSSION

This study takes advantage of relatively large samples of women offenders to examine their motivation to participate in community-based aftercare, as well as the effects of their

participation in aftercare on their risk for recidivism. Although a majority of the survey participants intended to go to aftercare upon their parole, only about one third indicated their interest in going into FOTEP, where needed employment, vocational, parenting, and health-related services are provided. Moreover, motivation for aftercare was highly variable among the sample. In particular, the lower levels of treatment motivation among African American, Hispanic, and women of “other” racial/ethnic groups, as well as their underrepresentation in aftercare treatment programs relative to their incarceration rates, raise concerns given their higher reported need for economic and health services (Grella & Greenwell 2007) and the health disparities among minority women that are further exacerbated by their higher rates of incarceration (Freudenberg 2002). Research is needed to better understand how their participation in treatment is influenced by external or system-related factors and by internal, motivational factors.

In contrast, women who were involved in the child welfare system were more highly motivated to enter treatment, as were those with previous drug treatment experience or who used “harder” drugs as their primary substance. Other research has shown that women inmates who expect to live with their children are more likely to enter into either in-custody or community aftercare (Robbins, Martin & Surratt 2009; Pelissier 2004), suggesting the central role of family reunification in influencing women’s treatment participation.

In prior evaluation studies, focus groups conducted with FOTEP participants indicated that some women who are eligible to participate in the aftercare program may decline because of compelling family commitments, a desire to return to a job or relationship, or because they do not want to continue to be in a confined environment following their release from prison (Grella 2008). As the survey finding showed, these concerns may be counterbalanced by the provision of much-needed services (i.e., employment, family-related, mental health), a program’s proximity to a woman’s home and family, and the ability to have children in residence with them while in treatment. However, for many women, even these factors are insufficient in the absence of external pressure, such as from child welfare or parole, or incentives, such as early release from parole. Motivational interventions, designed specifically to address these barriers to treatment participation among women, may help to increase their problem recognition and willingness to participate, as has been demonstrated for male offenders (Rosen et al. 2004).

Findings from the recidivism analysis supported the study hypothesis regarding effects of FOTEP treatment participation on reduced risk of recidivism. Specifically, individuals who completed treatment, or who stayed longer, had considerably reduced risk of returning to prison. In addition, those who had participated in prison-based treatment prior to FOTEP had reduced risk of recidivism. These findings suggest the additive effects of combining in-prison treatment and community aftercare, within a “continuing care” context (McKay 2009).

Study Limitations

An important consideration in interpreting these findings is self-selection bias, in which those participants who entered into FOTEP aftercare, and who completed or stayed longer, may be more likely to succeed on parole, independent of the possible beneficial effects of treatment. In addition, variables available for the recidivism analyses were limited to those in the administrative database and on treatment participation; more in-depth background information as well as data on psychosocial functioning while on parole are not available, thus limiting the scope of the analyses. Lastly, study findings may be specific to women offenders in California, stemming from the unique features of the population, the correctional system, and the treatment options available to women offenders.

Conclusion

The study findings demonstrate that women offenders with substance use problems have variable levels of motivation to participate in aftercare treatment. Motivational interventions that address the perceived treatment needs and preferences of this population and that promote the beneficial effects of participation in a continuum of treatment services on reducing their risk of recidivism, may help to increase treatment utilization among this population.

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FIGURE 1.

Time to First Incarceration After FOTEP Discharge by In-Custody Treatment Participation up to 12 Months (N=1,182); Product – Limit (Kaplan-Meier) Method

TABLE 1

Multivariate Regression Model Predicting Treatment Motivation for Aftercare Among Women in Prison (N = 1,043)

Variable	Parameter Estimate	Standard Error
Intercept	2.43***	0.22
Race/Ethnicity (Ref = White)		
African American	−0.24*	0.11
Hispanic	−0.23*	0.11
Other	−0.34*	0.17
Age	0.00	0.01
Child in Child Welfare System	0.25*	0.11
More than One Prison Term	0.19 [†]	0.10
Previous Drug Treatment	0.29**	0.10
Hard Drug User ^I	0.87***	0.11
Previous FOTEP Participation	0.12	0.14
Region of Parole (Ref = Region I)		
Region II	−0.33*	0.13
Region III	−0.19	0.12
Region IV	−0.26*	0.11
Adjusted R ²	0.10	

[†]
p < .10,

*
p < .05,

**
p < .01,

p < .001

^I
Refers to cocaine, heroin, or methamphetamine vs. alcohol or marijuana use

TABLE 2

Rates of Return to Prison Within 12 Months of FOTEP Discharge

	Return to Prison					
	Yes (n = 435)		No (n = 747)		Total (n = 1,182)	
	n	%	n	%	n	%
Race/Ethnicity						
African-American	138	31.7	203	27.2	341	28.8
Hispanic	107	24.6	165	22.1	272	23.0
White	177	40.7	354	47.4	531	44.9
Other	13	3.0	25	3.3	38	3.2
Age**						
19-29	136	31.3	187	25.0	323	27.3
30-39	175	40.2	277	37.1	452	38.2
40-49	101	23.2	234	31.3	335	28.3
50+	23	5.3	49	6.6	72	6.1
Violent Crimes	44	10.1	71	9.5	115	9.7
Property Crimes*	184	42.3	272	36.4	456	38.6
Drug Crimes*	193	44.4	380	50.9	573	48.5
Other Crimes	13	3.0	24	3.2	37	3.1
Commitment Type***						
Felon	371	85.3	552	73.9	923	78.1
Civil Addict	64	14.7	195	26.1	259	21.9
Received in-custody treatment**						
Yes	282	64.8	545	73.0	827	70.0
No	153	35.2	202	27.0	355	30.0
Parole Region						
I	134	30.8	240	32.1	374	31.6
II	45	10.3	66	8.8	111	9.4
III	146	33.6	259	34.7	405	34.3
IV	110	25.3	182	24.4	292	24.7
FOTEP Completion / ***						

		Return to Prison					
		Yes (n = 435)		No (n = 747)		Total (n = 1,182)	
		n	%	n	%	n	%
Yes		40	10.6	313	46.2	353	33.5
No		337	89.4	365	53.8	702	66.5
FO/TEP Cohort ²							
1/05 - 6/05		173	39.8	264	35.3	437	37.0
7/05 - 6/06		232	53.3	424	56.8	656	55.5
7/06 - 6/07		30	6.9	59	7.9	89	7.5

¹ Cases who were either missing on this variable or discharged for reasons not related to completion of treatment (e.g., parole completion, medical discharge) are not included.

² Based on FY of admission

* $p < .05$,

** $p < .01$,

*** $p < .001$

TABLE 3

Predictors of Return to Prison Within 12 Months of FOTEP Discharge (N = 1,182)

Variable	Parameter Estimate	Standard Error	Hazard Ratio	95% CI
Age	-0.01	0.01	0.99	0.98, 1.01
Race/Ethnicity (Ref = White)				
African-American	0.22	0.13	1.24	0.95, 1.62
Hispanic	-0.02	0.14	0.98	0.74, 1.30
Other	-0.09	0.33	0.92	0.48, 1.75
Felon (vs. Civil Addict)	0.18	0.17	1.20	0.87, 1.67
Type of Offense (Ref = Violent Crime)				
Property Crime	0.04	0.19	1.05	0.73, 1.50
Drug Crime	-0.15	0.18	0.86	0.60, 1.24
Other Crime	-0.32	0.36	0.73	0.36, 1.47
Region (Ref = Region I)				
Region II	0.30	0.19	1.36	0.93, 1.98
Region III	-0.32	0.15	0.73*	0.54, 0.97
Region IV	0.06	0.15	1.06	0.79, 1.42
Received In-Custody Treatment	-0.31	0.11	0.73**	0.59, 0.92
Time In Treatment (Ref = 1–30 Days)				
31–60 Days	-0.12	0.16	0.89	0.65, 1.20
61–90 Days	-0.22	0.16	0.81	0.59, 1.11
91–120 Days	-0.36	0.20	0.70†	0.47, 1.04
121–150 Days	-0.81	0.26	0.44**	0.27, 0.74
151–180 Days	-1.16	0.27	0.31***	0.19, 0.53
180+ Days	-1.57	0.19	0.21***	0.14, 0.30

CI = Confidence interval

†
 $p < .10$,*
 $p < .05$,**
 $p < .01$,***
 $p < .001$