



Vol. 6, No. 1
February 2007

The Pennsylvania Commission on Sentencing Research Bulletin

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The Impact of a 30-day Aftercare Provision on the Recidivism of Pennsylvania's Boot Camp Graduates: A Summary of the 2007 Legislative Report

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In 1990, the Pennsylvania Legislature passed Act 215, which established Pennsylvania's Motivational Boot Camp Program. This Act also mandated the Sentencing Commission to report annually to the House and Senate Judiciary Committees on the progress of the Boot Camp Program. Act 112 of 2004, which created the new State Intermediate Punishment Program, changed the reporting requirement so that in odd numbered years, the Sentencing Commission submits a Legislative Report on the Boot Camp Program and in even numbered years submits a report on the State Intermediate Punishment Program. The 2007 Legislative Report was the first under the new reporting requirement, and this edition of the *Research Bulletin* provides a summary of the findings from that report.

What is the Motivational Boot Camp Program?

The Motivational Boot Camp, which is located in Quehanna, Clearfield County, serves as an alternative to traditional state prison, and allows eligible inmates to serve a reduced six-month sentence if they successfully complete the program. The impetus behind the legislation was the recognition of the severe prison overcrowding situation. Further, there was legislative interest in offering an alternative to prison that would provide a more intense rehabilitative setting conducive to achieving the goal of crime reduction. The Boot Camp opened in June 1992, with 39 offenders being admitted into

the program that year. Since that time, the program has grown, with an average of 475 offenders being admitted during the last ten years. A total of 5,177 offenders have been admitted since 1992 through 2005, with about 87% graduating successfully from the program.

The Boot Camp is designed to instill discipline and structure through regimented sixteen-hour days consisting of work and program activities. A typical day begins at 5:30 a.m. with reveille, followed by an hour of physical training. The remainder of the day is tightly scheduled with education, counseling, and work. Offenders who have not graduated from high school attend mandatory education classes, while those who have a degree are assigned to work duties.

To be accepted into the Boot Camp Program, potential candidates must meet the statutory eligibility criteria and be recommended by the sentencing judge, with the Department of Corrections making the final determination concerning admissions. Offenders who voluntarily or involuntarily withdraw from the program return to prison for the remainder of their minimum sentence prior to being reviewed by the Parole Board for release. Those who graduate from the program are automatically released to parole supervision until the expiration of their maximum sentence.

MAJOR FINDINGS

- ◆ Since the opening of the Boot Camp in 1992 through 2005, there have been 5,177 offenders admitted to the Boot Camp Program, with an average of 475 offenders being admitted during the last ten years. The typical offender entering Boot Camp is young, non-white, male, convicted of a drug offense, and from an urban area.
- ◆ The vast majority of offenders felt they benefited from the Boot Camp Program and after graduation reported that they were more likely to be employed full-time, less likely to use drugs, were less impulsive, and acquired better decision making skills
- ◆ Overall, during a two year tracking period, about 19% of the Boot Camp graduates in the recidivism study were recommitted for a technical violation and 31% were arrested for a new crime. In comparing offenders who had 90 days of aftercare, 30 days of aftercare, and no aftercare, there was no significant difference in their recidivism
- ◆ Offenders who were younger when first arrested and had a greater number of prior arrests were significantly more likely to recidivate. Additionally, offenders convicted of a non-drug crime and those who indicate a stronger need for help with their drug problem are significantly more likely to have technical violations, and offenders who were non-white, not employed or going to school, have a greater problem controlling their temper, and don't like complicated tasks are significantly more likely to be arrested for a new crime

Offender Survey

The Boot Camp's enabling legislation outlined several objectives for the program that included reducing recidivism, promoting characteristics of good citizenship, and providing discipline and structure. In an effort to address whether these legislative objectives are being met, the Commission has not only conducted several recidivism studies, but also developed an Offender Survey, with assistance from the Department of Corrections and Board of Probation and Parole, that is designed to measure changes offenders experience as a result of going through the program. The survey, which has been administered since October 2000, is given at three points in time: admission, graduation, and parole.

Part I of the Survey is a Self-Report Survey that asks offenders about prior criminal activity, substance abuse, employment history, and family stability. Part II is a Boot Camp Evaluation Survey that measures attitudinal changes along several dimensions that are addressed through the programmatic aspects of the Boot Camp, such as self-control, motivation for change, self-efficacy, and decision-making. The responses from these surveys not only provide a more in-depth profile of the Boot Camp offenders, but also are utilized in our research assessing the impact of the Boot Camp on attitudinal and behavioral changes, including recidivism.

Survey Sample. The Survey findings for the current report are based upon the 832 offenders who graduated from Boot Camp between April 2001 and August 2005, and responded to the survey at all three phases, which represents an overall 42% response rate. [Of the 1,983 offenders who graduated during this time period, 1,879 responded to the survey at the graduation phase and 938 responded at the parole phase, which represents a 95% and 47% response rate, respectively.]

Offender Characteristics. Table 1 shows that the typical offender admitted to Boot Camp is young, male, non-white, from an urban area, and convicted of a drug crime. While most offenders had never been married, most did have at least one child. The majority of offenders indicated that, prior to attending Boot Camp, they had completed high school, were employed, had a manual labor job, held their current job for over two years, and identified their job as their primary source of income. A sizable percentage, however, identified illegal sources as their primary means of support, and those offenders also reported higher monthly incomes. Offenders were slightly more likely to be raised in a two-parent rather than a one-parent household. Both parents were more likely than the offender to have graduated from high school and to have attended college. The offender's exposure to crime was high; almost all of them had committed prior crimes, and the majority reported having been the victim of a crime. Additionally, most reported that a family member, as well as a friend, had been incarcerated at some point. The vast majority of offenders used drugs, mostly marijuana and cocaine, and over half were using drugs the day they committed their 'Boot Camp' offense. While most offenders did not have a fear of being addicted to drugs, most did report that they had previously made an attempt to quit.

Expectations of Boot Camp. Upon admission to Boot Camp, offenders indicate that they have high expectations of Boot

Table 1. Characteristics of Boot Camp Offenders

<u>Demographic Factors</u>	<u>Percent</u>
Race - nonwhite	64%
County- urban	83%
Mean age	25 years
Gender- male	96%
Marital Status- single	79%
Have children	64%
Have children living with them	59%
Education High School or more	54%
Employed or in school	66%
Major source of income is job	51%
Lived with both parents as child	44%
<u>Criminal Justice Factors</u>	
Current offense is drug offense	72%
Mean age at first arrest	18 years
Family member ever incarcerated	53%
Friend ever incarcerated	85%
Had been victim of crime	53%
Incarcerated as juvenile [if arrested]	66%
Had ever used drugs	90%
Mean age at first drug use	15 years
Used drugs day of crime	51%
Used alcohol day of crime	25%
Had tried to quit drugs	61%

Camp. The vast majority of offenders felt that Boot Camp would have a positive impact on their lives and be beneficial in areas such as: helping them obtain a job, learning self-discipline, becoming a better person, addressing their drug problem, and reducing the likelihood that they would get into trouble again. While they indicated at graduation that their high expectations were not always met, most graduates expressed that they had indeed benefited from the experience, and continued to feel this way six months later on parole.

Attitudinal Changes. The most significant attitudinal shifts occurred with respect to impulsiveness, decision-making and substance abuse. As one of the legislative objectives in creating the Boot Camp was to instill self-discipline, the Survey included a scale to measure changes in impulsivity. After going through Boot Camp, offenders indicated they were significantly less likely to engage in impulsive behavior, a finding that endured at the parole stage.

Consistent with our findings in previous years, we also found that there was a pronounced change in offenders' decision-making capabilities after attending Boot Camp. Upon graduating from Boot Camp, they were significantly more likely to think about the consequences of their decisions, plan ahead, make good decisions, have less trouble making decisions, think about the results of their actions, analyze problems by looking at all the choices, think of several ways to solve a problem, and consider how their actions affect others. We speculated that their improved decision making skills were most likely related to the Boot Camp's implementation of the National Institute of Correction's 'Thinking for Change' program, which was implemented in July 2000.

In enacting the Boot Camp Program, the Legislature recognized the correlation between substance abuse and crime, and as a result, the program has had an emphasis on treatment. Though most offenders did not view their drug use as presenting problems for them, a sizable percentage did indicate the negative impact that drugs were having in their lives such as interfering with their thinking, hampering their work, causing problems with their health, and making their life worse. Offenders were significantly less likely to report problems with drugs after graduating from Boot Camp and while on parole.

Self-Reported Behavioral Changes. Offenders also reported positive behavioral changes six months after they graduated from the program. Chart 1a shows that 66% of the offenders report being employed full time on parole, compared to 44% who reported having a full time job prior to admission. Chart 1b shows that offenders were much less likely to use drugs [14%] and alcohol [18%] six months after Boot Camp than prior to Boot Camp [88%].

Chart 1a. After Boot Camp, more offenders report being employed.

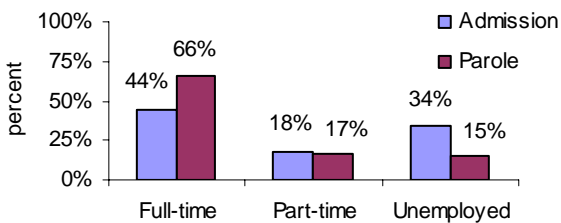
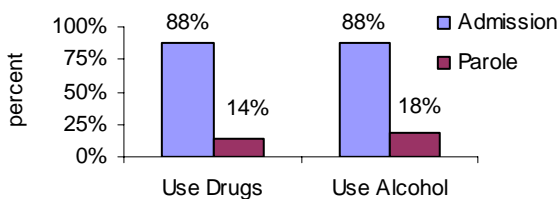


Chart 1b. After Boot Camp, offenders report less use of drugs and alcohol.



In addition, they indicated that they had made new friends and were significantly less likely to associate with ‘friends-in-trouble’. These behavioral shifts are encouraging, as previous research has found unemployment, substance abuse, and associating with problematic friends to be related to engaging in criminal activity.

Recidivism Study: Impact of Aftercare

A major purpose behind the creation of Pennsylvania’s Motivational Boot Camp Program was to implement a program to reduce criminal behavior. Responses from the Offender Survey indicate that offenders are making significant changes in areas known to be correlated with criminal activity, such as increases in employment, decreases in the use of drugs and alcohol, and less association with delinquent friends. Numerous studies have suggested that the continued success of maintaining employment, avoiding

substance abuse, and associating with ‘law-abiding’ friends is bolstered by an aftercare program that provides services and support for positive behaviors that are related to decreased criminal activity.

Previous Study: 90-day aftercare program. In an effort to provide more structured aftercare, a new policy requiring a minimum of 90 days in residential aftercare was implemented in March 2002 for Boot Camp graduates. If deemed necessary, the time period for aftercare could be extended beyond the 90 days. This structured re-entry program was designed to provide for a smoother transition to the community by offering offenders assistance with job readiness skills, job acquisition, and substance abuse follow-up while living in a supervised, residential facility. The Commission’s 2004 *Legislative Report* provided the results of our previous study comparing the recidivism rates of offenders who participated in the 90-day aftercare program with those who graduated from the program prior to the implementation of that policy. In that study, we found that, even when controlling for other factors responsible for recidivism that the offenders who participated in the 90-day aftercare program were significantly less likely to be re-arrested than those who had not participate in the program.

Current Study: 30-day aftercare program. In December 2002, this aftercare provision was reduced to a mandatory minimum of 30 days as the Department of Corrections found that a Community Corrections Center was offering the same services for less cost. In addition, offenders were being released to centers that were distant from their home community, where they had employment opportunities that were often lost due to a delay in their return. Thus, as a follow-up to our study of the 90-day aftercare program, the focus of the current study is to examine the impact of the 30-day program on recidivism.

Study Sample. The study employs a quasi-experimental research design that compares the recidivism rates of three groups of Boot Camp graduates: 1) offenders who graduated from Boot Camp prior to the implementation of the mandatory minimum aftercare policy [April 2001 through February 2002], 2) offenders who graduated from Boot Camp and participated in the 90-day minimum aftercare program [March 2002 through December 2002], and 3) offenders who graduated from Boot Camp and participated in the 30-day minimum program. [February 2003 through October 2003]. The total sample consisted of 1,091 offenders, with 374 in the pre aftercare group, 342 in the 90 day aftercare group, and 375 in the 30 day aftercare group.

Measuring recidivism. For the purposes of the current study, we used two measures of recidivism: re-arrest for a new crime and return to prison for a technical violation. We obtained the arrest information from the Pennsylvania State Police, and the technical violator information from the Department of Corrections. We used a two-year tracking period for each offender in order to equalize the ‘time on the street’ exposure time.

Independent Variables. One of the advantages to this study is that we were able to examine the impact of individual versus programmatic characteristics on criminal behavior. We have a great deal of information about the offenders through the Self-Report Survey given at the time of admission to the Boot Camp, including demographics [e.g., race, age, marital status], background [e.g., living arrangements growing up, education, employment history], criminal

history [e.g., type of previous crime, victim of crime] and substance abuse history [e.g., type and extent of abuse, previous treatment]. From the Boot Camp Evaluation Survey we were able to measure benefits that offenders obtained from the programmatic features of the Boot Camp and include those factors in analyses.

Findings. In order to answer our primary research question concerning the impact of the 30 day aftercare program, we first replicated the analysis of our previous 90 day study. In doing so, we found that while the direction of the finding concerning aftercare was the same [i.e., those who went through the 90 day aftercare program were less likely to be re-arrested], the results were not significant. [The significance level was .10, which some view as marginally significant, but is not the accepted standard of .05]. There were primarily two reasons for this change in the finding: 1) we had 6 offenders in our study who had died, but we did not have that information for our previous study - they were viewed as successes in our previous study, as they had no arrest, and 2) we received additional arrest information on 16 people in our 90 day aftercare group, which had not been available for the previous study.

Table 2. Recidivism Rates For Boot Camp Offenders by Factors Included in Recidivism Study [N=1091]

	Percent of Offenders			Number
	Success	Technical Violation	Arrest	
OVERALL	51%	19%	31%	1,091
Aftercare Group				
no aftercare	51%	16%	33%	374
90 day aftercare	51%	21%	27%	342
30 day aftercare	50%	19%	32%	375
Race ***				
white	58%	23%	20%	340
black	47%	16%	38%	539
hispanic	49%	19%	33%	206
Education **				
less than High School	47%	23%	31%	520
High School	50%	18%	33%	266
more than High School	59%	13%	28%	283
Employed Prior to Boot Camp ***				
full time	57%	17%	25%	424
part time	52%	17%	31%	122
in school	53%	13%	34%	38
working and school	62%	13%	25%	79
looking for work	44%	20%	36%	194
not looking, unemployed	36%	25%	39%	205
Current Offense **				
drugs	52%	16%	32%	728
personal	56%	16%	28%	98
property	45%	34%	21%	100
other	41%	28%	31%	94
Mean number of prior arrests ***	2.3	3.7	3.8	1,091
Mean age at first arrest ***	18.7	17.0	17.0	985
Mean Scores on Scales at graduation				
Temper *** [range=4-20]	9.3	9.6	10.4	1,031
Completing Tasks *** [range=3-15]	6.0	6.4	6.6	1,034
Help with Drugs *** [range=6-30]	15.5	17.9	15.5	948

* Significant at .05 level ** Significant at .01 level *** Significant at .001 level

The analysis for the current study expanded upon that of the previous study by not only looking at re-arrests, but also technical violations, as a measure of recidivism. We included in our analysis information obtained from the Offender Survey and official criminal history records. We present the findings in two ways. First, the bivariate results indicate which factors are significantly related to recidivism when examined individually. Second, the multivariate [polynomial logistic regression] results indicate which factors are significantly related to recidivism while controlling for factors simultaneously.

Bivariate analysis. Table 2 shows the recidivism rates for the Aftercare Sample Groups, as well as for those factors that were found to be significant at both the bivariate and multivariate level of analysis. Overall, the success rate for offenders in our study was 51%, with 19% of the offenders being returned to prison for a technical violation and 31% re-arrested for a new crime. While the success rate for all three groups in the study was the same, the 90-day aftercare group had a higher rate of technical violations than the pre-aftercare group or 30 day aftercare group [21%, 19%, 16% respectively], and a lower rate of arrests [27%, 32%, 33%, respectively]. This finding, however, was not significant.

Those offenders who were white, had schooling beyond High School, were employed and/or attended school, committed a personal offense, had fewer prior arrests, and were older at their age of first arrest had the highest rates of success.¹ Additionally offenders, who indicated that they had trouble controlling their tempers and trouble completing difficult tasks were more likely to be re-arrested while those who indicated they needed help with their drug problem were more likely to have technical violations.

Multivariate analysis. Table 3 shows which of these factors best predict recidivism while controlling for all factors simultaneously. It should be noted that the final analysis only considers cases in which the information was available for all variables considered in the model, and that 255 [23%] were removed due to missing information on one or more of the variables.

The two factors related to both measures of recidivism were age at first arrest and the number of prior arrests. For age at first arrest, for each year increase in age there is a 5% decrease in the odds of getting a technical violation and a 9% decrease in the odds of getting a new arrest. For each prior arrest, the odds of getting a technical violation increase by 16% and the odds of getting a new arrest increase by 19%.

¹ It should be noted that we examined the impact of employment status both prior to Boot Camp and after Boot Camp. While both measures of employment were found to be significantly related to less recidivism, we were unable to use employment status post Boot Camp as were missing that information for 49% of the offenders.

Table 3. Predictors of Recidivism

Variable	Technical Violation		New Arrest	
	Logit Coefficient	Odds of Technical Violation	Logit Coefficient	Odds of Re-arrest
Aftercare Group [compared to no aftercare group]				
90 day aftercare	0.199	1.220	-0.201	0.818
30 day aftercare	-0.011	0.989	-0.183	0.833
Race				
non-white	0.176	1.192	.876***	2.401
Conviction Offense				
non-drug	0.493*	1.637	0.201	1.222
Number of Prior Arrests	0.148***	1.159	0.175***	1.191
Age at First Arrest	-.055*	0.946	-0.090***	0.914
Employment Status				
unemployed prior to Boot Camp	0.363	1.438	0.416*	1.517
Education [compared to 'more than high school']				
less than high school	0.455	1.576	-0.258	0.773
finished high school	0.288	1.334	0.213	1.237
HELP [with drugs] Scale [scale range 7-35]	0.068***	1.070	-0.006	0.994
TEMPER Scale [scale range 4-20]	0.010	1.010	0.105***	1.110
TASK Scale [scale range 3-15]	0.028	1.028	0.102*	1.108

* Significant at .05 level ** Significant at .01 level *** Significant at .001 level

Additional factors that predicted technical violations were type of offense and the offender's score on the Drug Help Scale. Offenders convicted of a non drug conviction had a 64% increase in the odds of having a technical violation compared to offenders with a non drug conviction. Further analysis found that this was true for property and other types of crime, but not for personal offenders. Offenders who felt most strongly that they needed help with their drug problem were 6.7 times more likely to receive a technical violation compared to those who felt most strongly that they did *not* need help. While unemployed and less educated offenders were more likely to get technical violations than employed and more educated offenders, this finding only 'approached significance' [.084 and 0.070 respectively].

Additional factors that predicted a new arrest were race, employment, and scores on the Temper Scale and Task Scale. Non-white offenders were 2.4 times more likely than white offenders to be re-arrested. The odds of unemployed offenders getting a new arrest increased by 52% compared to those who were employed or in school. Those offenders who felt they had the most difficulty controlling their temper were 5.4 times more likely to have an arrest, compared to offenders who felt they had the least difficulty controlling their temper. Offenders who indicated they had the most difficulty with complex tasks were 2.8 times more likely to have an arrest compared to those with the least difficulty.

Summary and Conclusion

Since the inception of the Boot Camp in 1992, there have been 5,177 offenders admitted into the program, with the peak year being 2003 with 637 admissions. The typical offender is young, male, non-white, from an urban county, and convicted of a drug offense.

Responses from the Offender Survey indicate that offenders have very high expectations for the Boot Camp, and while not always met, the overwhelming majority report that the Boot Camp was a positive experience. Additionally, graduates of the program indicated that significant attitudinal and behavioral changes occur, and that these changes are still evident six months after graduation. The most significant changes found were with offenders becoming less impulsive and better decision-makers, having less problems with drugs, associating less with 'friends in trouble', and being more likely to be employed.

In the recidivism study we found no difference in the overall recidivism rate of offenders who participated in either the 30-day or 90-day mandatory minimum residential aftercare programs compared to those who did not receive this aftercare. It is, however, encouraging that some of the factors found to be most significantly related to recidivism are considered 'dynamic' factors, which can be addressed through program interventions. Offenders who felt strongest about needing help for their drug problem were those most likely to receive technical violations, suggesting continued substance abuse treatment is necessary for those offenders. Offenders who felt strongest about having difficulty controlling their temper were more likely to have a re-arrest, suggesting continued anger management programs are necessary for those offenders.

The finding that aftercare did not impact recidivism does not necessarily negate the need for aftercare programs. Rather, our findings do support the importance of targeting the specific needs of offenders upon return to the community, and recognizing that addressing these needs may not bring about quick or permanent results, but may need reinforcing over time.

Since the inception of the Motivational Boot Camp Program in 1992, another alternative prison program, State Intermediate Punishment, was established in 2005. Both of these programs were created to enhance public safety by offering offenders treatment programs oriented toward reducing their criminal behavior, while helping to ease the prison overcrowding problem. As the Commission is mandated to evaluate both of these programs, it is anticipated that future studies will address the issue of what type of program works best for what type of offender.

Full Report Available. The entire 2007 Legislative Report, *Pennsylvania's Motivational Boot Camp: The Impact of Aftercare on Recidivism*, can be found on the Commission's website <http://pcs.la.psu.edu> or obtained by contacting the Commission at 814. 863.2797.

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The Pennsylvania Commission on Sentencing is an agency of the General Assembly located on the University Park campus of The Pennsylvania State University. The Commission was created in 1979 for the primary purpose of creating a consistent and rational statewide sentencing policy to promote fairer and more uniform sentencing practices.

Offenders' comments on Boot Camp are positive:

It is a good program for changing lives if you want to better yourself. If I didn't go there I probably go back to the streets and end back in prison. Thank You!!!

I've learned a lot of discipline that I never had. It's changed my life for the better

Thanks for showing me a different aspect of life.

Nice to have a program that makes you realize your actions have consequences to others.

BC is helpful as long as you want to help yourself

Boot Camp changed my life, my thinking skills, and relationships with friends, family, are better.

I believe that the boot camp program is a great opportunity for first-time felon's to get their lives back on track and to start all over.

Boot Camp should have a program for individuals on verge of re-offending and also have a hotline available.

Best thing that ever happened; was exactly what was needed to straighten myself up; thank you.

Helped realize crime doesn't pay

I learned patience and self control, not goal can't be reached.

It was a life-changing 6 months

It was a very good program and it had helped me out a lot. My life is 110% better because of it