EXECUTIVE SUMMARY

Prison Program Utilization and Recidivism among Female Inmates in New Mexico

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Key findings:

• Women with longer stays were more likely to participate in programming

• Specific program recommendations and criminogenic needs often did not translate into participation in related programs

• Women with a greater number of criminogenic needs and recommendations were more likely to participate in programs

• Program participation generally was not significantly related to recidivism

• Women who participated in educational programming were less likely to re-offend

• Matching, recommending, and promoting programming appropriate to criminogenic needs may decrease future offending

• Contrary to some prior research, program participation among women at low risk of recidivism was not detrimental to their post-release success

• Though not a primary question in this study, we found post-release supervision was associated with decreased adjudications and incarcerations for new offenses

In recent years, New Mexico has experienced an increase in its female inmate population. Indeed, in 2011 the female prison population exceeded the prison capacity, temporarily forcing the New Mexico Women's Correctional Facility (NMWCF) to house women in a segregated pod at the nearby men's facility. While the NMWCF has since expanded their capacity to meet this demand so women are no longer housed at the same facility as men, the upward trend has continued. Since fiscal year 2010, the female inmate population has increased by 14%. This is similar to national trends, where the rate of growth among incarcerated females has outpaced that of males (Glaze and Kaeble, 2014).

This is not the first time, though, that New Mexico experienced such increases in its female population. Indeed, in 2003 in response to a burgeoning population, the NMCD initiated a gender-responsive model aimed at promoting successful female reentry through appropriate programming (Carr, 2007). Prison programming is important for inmates. Many enter prison with deficiencies in their education, job histories, and in other aspects of their personal lives. Appropriate in-prison programming can help prisoners successfully reintegrate into society.

This is crucial as most inmates return to the community, but recidivism rates are high. For example, among a national sample of prisoners released in 2005, over two-thirds were re-arrested within three years of release and nearly 77% were re-arrested within five years; recidivism was highest for property offenders (Durose, Cooper, and Snyder, 2014). While females were re-arrested at lower rates than males, 68% of females were re-arrested five years post-release (Durose, Cooper, and Snyder, 2014). Appropriate prison programming may help to reduce recidivism. However, utilization and effectiveness of prison programming among New Mexico's female prison population have not been explored.

Study questions

In the current study, two aspects of in-prison programming are of particular interest. First, although there is an effort to ensure that prisoners are accessing appropriate programming, programming is not matched to offenders' risks and needs in a systematic way (Denman et al., 2011; Legislative Finance Committee, 2012). It is unclear, then, to what extent inmates access programs that reflect their criminogenic needs and community (recidivism) risk levels. Criminogenic needs are those factors that are highly

related to recidivism (e.g., substance abuse, criminal attitudes, employment status) but are changeable.

Methodology

This primarily descriptive study used bivariate and multivariate analyses to explore program utilization and recidivism. We followed a cohort of women released from the NMWCF in 2009 for a period of four years to ensure ample time to assess recidivism. A total of 436 women were released in 2009; we were able to obtain data for 426 of them. Data used for these analyses include automated administrative records from the New Mexico Corrections Department (NMCD), the New Mexico Department of Public Safety (DPS), and the Administrative Office of the Courts (AOC). We also collected data from hard-copy records at the NMWCF. These were entered into Excel. All data were converted to SPSS for analysis and were merged using common identifiers.

We utilized multivariate logistic regression models to assess characteristics associated with program participation and recidivism. We calculated a series of nested models to assess the relative impact of sets of independent variables on each of the dependent variables (e.g., program participation overall, participation in each type of program, various measures of recidivism). The results of the final models with all sets of variables are reproduced here.

Logistic regression analyses calculate an odds ratio for each independent variable. The odds ratio can be interpreted as the multiplicative change in the odds of participating in a program. For example, when looking at program participation overall, we may find an odds ratio for one independent variable was 1.3. This would indicate that an increase of one-unit in this independent variable is expected to *increase* the odds of program participation by 30%. Similarly, an odds ratio of 0.7 would indicate that an increase of one-unit in that independent variable would *decrease* the odds of participation by 30%. In the results below, we describe whether there is an increase or decrease.

Findings

Program participation

Over two-thirds (68.5%, N=292) of the women participated in one or more programs during their incarceration. While most women (58%) participated in only one program, a few participated in up to ten individual programs. We grouped programs into five categories for the remaining analyses: life skills, substance abuse, mental health/cognitive (programs that promote cognitive-behavioral change or address an inmates' emotional well-being), educational (academic), and vocational. Among female offenders who participated in one or more programs, the most common (87%) was life skills, which was almost entirely comprised of the Recidivism Reduction Program (a program that is not currently offered). Though a distant second, the next most common type of program (27%) women participated in was substance abuse, most often either Therapeutic Communities or Residential Drug Abuse Program. Nearly 20% of women participated in educational programming, 16% participated in mental health/cognitive programs, and 11% in vocational programs.

We analyzed several groups of variables in multivariate analyses to determine which were associated with program participation. These include demographics (race and age at intake), criminal history (prior incarcerations and property offense), confinement-related (days of incarceration and classification level), recommendations, criminogenic needs, and community risk level. These variables were chosen due to their theoretical import or observed statistical significance in bivariate analyses.

Demographic variables were generally not related to program participation, with two exceptions. First, older women were significantly less likely to participate in educational programming. The odds ratio of .953 indicates that for every one-year increase in age, women are about 5% less likely to participate in educational programming. Second, white women were significantly more likely to participate in vocational training relative to non-White women.

Criminal history variables were related to program participation. Females incarcerated previously were less likely than women who had never been incarcerated to participate in programming, regardless of the type of program. However, this was only statistically significant for program participation overall and life skills programs. Women with a current property offense were significantly less likely to participate in life skills programming relative to women whose current offense was something else.

Generally, we found that the longer women were incarcerated, the greater their odds of participating in a program. This variable was statistically significant and positively related to programming overall and to every type of programming except participation in life skills (Recidivism Reduction). Initial classification level, though, was not significant.

Prison staff recommendations for programming were significantly related to overall program participation and education programming. The relationship with overall program participation indicates that the greater number of programs recommended, the greater the odds of participating in one or more programs. Here, though, we did not match the type of recommendation to the program type. In analyses of the specific programs, we did match the recommendations with program type. Women who were recommended for educational programming were 2.412 times more likely to participate in education programs. Recommendations were not significantly related to other specific program types.

Women with higher needs overall were more likely to participate in one or more programs. For every one-unit increase in level of need, the odds of program participation increased by 1.897 times. Once we matched need type to program participation type, we found that only women who had greater life skills need were more likely to participate in life skills program. However, we expect that this may be a spurious relationship because so many female inmates participated in life skills programming and so few actually had life skills needs identified.

Finally, community risk level was significantly associated with program participation overall as well as participation in substance abuse, vocational training, and life skills programs. Each risk level reported is relative to low-risk. Women assessed extreme risk were significantly less likely to participate in substance abuse programs, life skills programs, and programming overall relative to low-risk women. Likewise, the odds of participation in vocational training were significantly lower for those who were assessed as medium risk compared to those assessed as low risk.

Table 1: Logistic regression results: summary of program participation models

Block	Variable	Any program	Substance abuse	Education	Vocational training	Life skills	Mental health/ cognitive
		Participation in programming (N=378)					
Demographics	White	1.655	1.469	1.904	3.053*	1.601	1.503
	Age at intake	1.024	.997	.953*	.969	1.026	1.012
Criminal history	Prior incarcerations	.306***	.496	.447	.850	.333***	.318
	Current property offense	.604	.829	1.182	1.482	.543*	.867
Confinement related	Days of incarceration	1.002***	1.001***	1.001***	1.002***	1.000	1.002***
	Classification Level 2	1.250	1.346	.987	2.216	1.430	1.409
	Classification Level 3/4	.631	1.562	1.054	1.380	.678	2.884
Recommendations and needs	Recommendations	1.155*	1.244	2.412*	1.022	.932	.929
	Total need score	1.897**	1.129	.896	.695	1.610***	---
Risk	Medium	1.457	.750	1.523	.453	.972	.907
	High	.773	.587	1.055	.120**	.626	.376
	Extreme	.306*	.031*	1.055	.044	.262**	.024
	Constant	.237	.117	.228	.103	.808	.024

*p≤.05, **p≤.01, ***p≤ .001

Recidivism

We measured recidivism in a variety of ways to determine whether program participation had any effect on any measure of re-offending. Besides re-offending generally, we included subsequent arrests, subsequent felony adjudications, subsequent felony convictions, subsequent incarcerations for any offense, and subsequent incarcerations for new crimes only. Most women (67%) reoffended within the four-year follow-up period. Over half (60%) were arrested one or more times and almost 40% were re-incarcerated, though just 16% were re-incarcerated for one or more new crimes only. We also examined subsequent felony-level district court adjudications and convictions, and found that 27% of women were re-adjudicated and 25% reconvicted.

We assessed the influence of any program utilization on recidivism controlling for demographics, criminal history, criminal justice system-related variables, risk scores, and criminogenic needs in a series of nested models; the final model results for each recidivism measure are summarized below. As with the program utilization models above, the variables included in the multivariate analyses were chosen because they were statistically significant in bivariate analyses or were of theoretical import.

Some of the control variables were statistically significant. Largely, demographic variables did not strongly predict recidivism. The odds of recidivism were lower for white women compared to non-white

women, but this measure was significant only for re-arrests. Age and marital status were not statistically significant once all variables were included in the analyses. A current drug offense was a significant predictor only for adjudications and incarcerations for a new offense; that is, the odds of recidivism were higher for drug offenders relative to women whose current most serious offense was not a drug offense.

One of the system-related variables, supervision post release, was associated with recidivism. The odds of re-adjudication, re-conviction, and re-incarceration for a new crime were lower for women who were supervised relative to those who were not supervised. Conversely, women who were supervised were 2.34 times more likely to be re-incarcerated for any type of offense compared to those who were not supervised. Since this measure of recidivism includes returns to prison for both new crimes as well as parole violations, we expect this finding is a reflection of returns to prison for parole violations.

Offenders with higher average criminogenic needs were less likely to be re-incarcerated. It is not immediately clear why this is the case. Relative to those assessed as low-risk, women with higher community risk levels were more likely to be re-adjudicated, re-convicted, and re-incarcerated for a new offense and were more likely to re-offend overall. This was statistically significant, however, only for women who posed a high risk. Women assessed as extreme risk were over four times more likely than women assessed as low risk to re-offend overall, but no significant differences were found by specific recidivism measures.

Program participation, the last variable included in each of the models, was not statistically significant. That is, participation in one or more programs of any type does not appear to be related to any measure of recidivism once the influence of other variables is considered. Instead, the most consistent and significant predictor of recidivism was total prior offenses: the greater the number of prior offenses, the greater the odds of recidivism.

Table 2. Logistic regression results: summary of final models of recidivism

Model	Variable	Arrests	Adjudication	Convictions	Incarceration	Incarceration no PVs	Any re-offense
Demographics	White	.554*	.624	.590	.711	.729	.687
	Married	.933	1.753	1.660	.862	1.317	.800
	Age at intake	.984	.985	.990	.990	.990	.990
Criminal history	Total prior offenses	1.293***	1.125**	1.107**	1.209***	1.155***	1.358***
	Current drug offense	1.449	1.936**	.379	1.208	1.916*	1.415
Criminal justice system-related	Length of incarceration	1.000	1.000	1.000	1.000	1.001	1.000
	Supervised post release	.892	.397***	.369***	2.340***	.517*	1.324
Criminogenic needs and risk	Total average need score	1.047	.841	.781	.669*	.586*	1.008
	Medium risk	1.110	1.782	1.782	1.503	2.309	1.495
	High risk	1.822	3.536**	3.003**	1.822	3.538*	2.146*
	Extreme risk	2.651	1.965	1.611	2.480	1.595	4.711**
Program participation	Any program	.877	1.174	1.237	1.332	.941	.873
	Constant	1.024	.313	.404	.218	.050	.701

*p≤.05, **p≤.01, ***p≤ .001

Program-specific participation and subsequent offending

Besides analyzing recidivism by program participation overall, we also assessed recidivism by program type. Only one type of program—educational programming—was significantly related to recidivism. In this analysis, we limited the needs type and program type to education. Further, we focused only on one recidivism measure—any subsequent offending—due to the limited number of cases. In Table 3 below, we summarize the results of the final analysis which includes all blocks of variables.

None of the demographic variables were statistically significant in the final analysis. As we saw in the models above, women with a greater number of prior offenses had greater odds of re-offending. In addition, women who had an assessed community risk level of high or extreme had significantly greater odds of re-offending compared to women assessed as low risk. The other control variables (current drug offense, length of incarceration, supervision post-release, and education need score) were not significantly related to re-offending. Importantly, controlling for all other variables in the model, the odds of re-offending were significantly lower for women who participated in educational programming compared to those who did not participate. This indicates that educational programming may be a successful intervention.

Table 3. Logistic regression results: Recidivism by education program participation

Block	Variable	Odds ratio
Demographics	White	.708
	Married	.841
	Age at intake	.986
Criminal history	Total prior offenses	1.368***
	Current drug offense	1.427
Criminal justice system-related	Length of incarceration	1.000
	Supervised post release	1.318
Criminogenic needs and risk	Education need score	1.016
	Medium risk	1.521
	High risk	2.229*
	Extreme risk	4.886**
Program participation	Any education program	.487*
	Constant	.699

*p≤.05, **p≤.01, ***p≤ .001

Key findings

We found several factors were associated with program utilization. The most consistent predictor was length of stay. For nearly every program type as well as program utilization overall, the longer a woman was incarcerated, the more likely she was to access prison programming. The one exception was life skills programs, which consisted almost entirely of the Recidivism Reduction Program, offered only at the end of a prison stay. We also found the greater the number of program recommendations, the greater the likelihood of participation in one or more programs. However, there was generally little relationship between recommendations in specific needs areas and participation in programs related to those needs. There was one important exception: education. Prison staff recommended educational programming to women who had greater educational needs. Further, women were more likely to participate in educational programming when recommended. We also found that participation in educational programming was related to decreased re-offending. These findings illustrate the importance of appropriate program utilization and its impact on recidivism. In fact, matching programming to criminogenic needs and promoting appropriate program utilization may decrease future offending.

A second key finding involves the inmate's risk. At least in 2009, prison staff making recommendations about programs would have been aware of the risk an inmate posed to the facility, but may not have been aware of her risk of recidivism. While there is a relationship between these risks, the correlation is not high (r=.016). Best practices make clear that programming should be targeted to offenders who pose a medium to high risk of recidivism and should reflect their criminogenic needs (e.g., Burke, et al., 2010; Serin, 2005). Some have argued that inmates who pose a low risk of recidivism may actually be harmed by participating in prison programming (in Wexler, Melnick, and Cao, 2004). However, in our bivariate analyses, we found women who posed a low risk committed significantly fewer new offenses as measured by re-adjudications, re-convictions, and commitments for a new offense. Further, the multivariate analyses suggest that if not beneficial to women who have a low level of risk, programming is not likely to be detrimental to their post-release success.