THE EFFECT OF
BRIDGES
TO LIFE
on *Reincarceration*

ABSTRACT

This paper assesses the effect of the *Bridges to Life* (BTL) program for prisoners on reincarceration rates using data provided by the Texas Department of Criminal Justice. BTL is a national program in which a volunteer coordinator meets weekly with participants in small group circles over the course of 14 weeks. Discussions focus on accountability, repentance, forgiveness, and reconciliation. In between sessions, participants read required materials and answer study questions to be discussed in the next small group discussion.

We employed a quasi-experimental design using propensity scores to match 296 BTL participants with 296 similar parolees out of a pool of 7,622 who had not participated in the program. We compared reincarceration rates after one year and after 3-3-1/2 years. The results of this analysis generally support the proposition that parolees who participated in the BTL program have lower rates of reincarceration than those who did not participate.

INTRODUCTION

In an effort to address the problem of increasingly large numbers of individuals leaving prison, the mid-2000s was characterized by a sudden embrace of "second chance" initiatives, approaches, and policies centered on prisoner reentry. Prisoner reentry encapsulates the *mediated* process of transitioning from prison to home after a period of institutional confinement (Mijs, 2016). Serving time in jail or prison is undoubtedly a transformative experience, one in which facility and prison management philosophies and access to programming and treatment play a substantial role in how the prison experience affects reentry outcomes. On the one hand, we know that time in prison can "harden people" and produce criminogenic outcomes (Duwe and Clark, 2016). Prison management decisions pertaining to security level classification for example, have been experimentally shown to increase post-release recidivism (Gaes and Camp, 2009). For others, however, anecdotal evidence suggests that prison can be a turning point and catalyst for self-transformation. The goal of achieving positive self-transformation, for example, underlies much of the life-skills based programming available (Jolley, 2018).

In any given year, hundreds of thousands of individuals are released from state prison (Carson and Sabol, 2018) and millions cycle in and out of jails (Jonson and Cullen, 2015; Lurigio, 2016). Of those released, a substantial number recidivate and return back to prison or jail. Analyses widely suggest that 75 percent of those released from state prison will be re-arrested within 5 years (Durose, Cooper and Snyder, 2014). With the failure of retribution policies on criminal recidivism becoming increasingly clear, so began the resurgence of the offender rehabilitation ideal (Andrews and Bonta, 2010; Cullen, 2013).

In line with the popularity of rehabilitation approach, the Bridge to Life (BTL) program was designed to help parolees to desist from committing crimes. BTL is guided by restorative

principles that highlight empathy toward victims and taking responsibility for their crime(s). BTL started in 1999 in a single prison in Richmond, Texas. Since then, over 54,000 men and women have graduated from the BTL program in 182 prisons and alternative facilities. The current study focuses on the effects of BTL on recidivism. In our analysis, we compare parolees who have completed BTL with similar parolees who did not participate in the program. Recidivism measures include prevalence of reoffending and time to failure. To conduct the evaluation, the Texas Department of Criminal Justice (TDCJ) provided two datasets of parolees – one consisting of parolees who had completed the BTL program and were released in the Dallas area between September 1, 2014 through August 31, 2015, and a second file of parolees released in the Dallas area during the same time period who had not participated in the BTL program.

Background

Although substantially under-funded,[1] the Second Chance Act, signed into law in 2008 by former President George W. Bush, did much to sustain the momentum of the reentry movement in its early years by providing needed political and financial capital. Reentry is now widely considered a *permanent feature of the correctional landscape* (Jonson and Cullen, 2015) and the field of corrections has "embraced the challenge of rethinking core functions through a reentry lens" (Travis 2007, p.84). This embrace is important because prison management decisions to offer access to programming and treatment have been shown to reduce post-release recidivism (Duwe and Clark, 2016).

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[1] Wacquant (2010) noted that the $165 million in funds set aside for prisoner reentry under the Second Chance Act equaled "less than one-quarter of one percent of the country's correctional budget…the sum of $20 monthly per new convict released, enough to buy them a sandwich each week" (p. 614).

Individuals offend for a variety of reasons and so according to one perspective, the reentry programs must also be diverse (Jonson and Cullen 2015). Reentry programming is varies on focus, design, and implementation. For example, reentry programs can be need-specific or multi-modal (Jonson and Cullen 2015). Often they are designed to develop educational, vocational, and job skills, provide opportunities for recreational or religious activity, and drill down on specific issues such as substance abuse, or psychological and cognitive behavioral issues (Cullen and Jonson, 2011). These programs can be geared towards prisoner rehabilitation and self-improvement or on barriers to successful prisoner reentry or both. The programming itself can be available pre-prison, for example as part of probation, in-prison under transition planning or post-prison as a requirement of parole (Mears and Cochran, 2015).

Although pre-release programs can certainly have a positive impact, continuity of care post-release can significantly increase the effectiveness of programming as measured by greater reductions in recidivism and increased time to failure (Jonson and Cullen 2015; Kurlychek and Kempinen 2006). For example, in a natural experiment testing the impact of a residential aftercare component added to a motivational bootcamp program, Kurlychek and Kempinen (2006) found that program participants who received the mandatory aftercare component had significantly lower recidivism rates at six months, one year, and two years-post release. Finally, programming can be implemented by a variety of groups and organizations including prison staff, non-profits, or community groups, such as faith-based organizations (Jonson and Cullen 2015). In all of the diversity and heterogeneity that characterizes reentry programming, the one thing these programs have in common is the goal of reducing post-prison recidivism.

A key challenge for the reentry movement, however, has been how to develop programs that can be empirically tested and demonstrated to be effective. While the research suggests that

reentry programming and offender-based rehabilitation programs do have a positive effect on post-prison outcomes (Jonson and Cullen, 2011; Weisburd, Farrington, and Gill, 2017) research has suggested that this is not a consistently positive or statistically significant outcome. Prison programming is heterogenous and therefore, so are its outcomes (Cullen and Gendreau, 2001). A systematic evaluation of reentry programs funded by the 2003 Serious Violent Offender Reentry Initiative (SVORI) was only able to demonstrate limited effects on outcomes such as housing and employment, and a reduction in subsequent re-arrests but not necessarily re-incarceration (Lattimore, Barrick, Cowell, Dawes, Steffey, Tueller, and Visher, 2012). In a more recent review of 15 systematic reviews examining 36 correctional treatments, Wilson (2016) found that interventions that were group and cognitive-behavioral based and offered the opportunity to be part of a therapeutic community were among the more effective programs (Weisburd, Farrington, and Gill, 2017).

In general, researchers have found four types of programs to be effective in reducing recidivism: (1) vocation and work programs, (2) drug rehabilitation programs, (3) halfway houses, and (4) pre-release programs (Seiter and Kadela, 2003). Additional program components that have been associated with lower recidivism rates among participants include: programs matched to level of risk and criminogenic needs (Lowenkamp, Latessa, and Holsinger, 2006); highly structured curriculum development, implementation, and delivery; and the provision of aftercare services to help prevent relapse (Clarke and Duwe, 2015; Matthews, Hubbard, and Latessa, 2001). Relapse prevention treatment approaches are most prominently geared toward high risk situations, such as in the case of sexual offending (Ward, Mann, and Gannon, 2007).

One school of thought argues that reentry programming needs a more consistent, theoretically sound, and empirically supported approach. One such approach, the Risk-Need-

Responsivity (RNR) model, outlined in 1990 by Andrews, Bonta, Hogue and colleagues, has become (and continues to be) a standard in correctional programming. The underlying premise of RNR is that the amount and intensity of treatment provided should be proportionate to the level of risk posed by the offender.

Under the RNR model, programming should target "dynamic risk factors associated with recidivism that can be changed" (Ward, Mann, and Gannon, 2007, p. 88). Determinations of risk are aided by the use of risk assessment tools, such as the Level of Service Inventory. Programming guided by RNR principles also aims to deliver treatment in a suitable way, such that individuals can actually hear, comprehend, and make use of in their rehabilitation journeys. The value of the RNR model and its impact in reducing recidivism rates has been supported over the years, including in a classic study on the effect of halfway houses on recidivism (Lowenkamp and Latessa, 2002) and in meta-analyses of *what works* in correctional treatment and prisoner reentry (Andrews, Zinger, Hoge, Bonta, Gendreau and Cullen, 1990; Ndrecka, 2014). Programs that follow the principles of RNR have been demonstrated to reduce recidivism whereas programs that don't incorporate these principles often are associated with null effects (Andrews, Bonta, and Wormith, 2011).

In recent years, other models centering on more holistic, positive, strengths-based, and restorative principles, such as the Good Lives Model (GLM), have emerged (Andrews, Bonta, and Wormith, 2011; Ward and Brown 2004; Ward and Gannon, 2008). The "good lives" conceptualization takes into account "offenders' strengths, primary goods, and relevant environments, and specifies exactly what competencies and resources are required to achieve these goods" (Ward, Mann, and Gannon, 2007, pg. 91). The goal is to live *a good or better life* (Willis and Ward, 2013). Goods can be primary or instrumental. A primary good is a "state of

affair, state of mind, personal characteristic, activity, or experience…likely to increase

psychological well-being if achieved" (Ward, Mann, and Gannon, 2007, pg. 90) and an

instrumental good provides a means for achieving the primary good. Preliminary evidence on the

integration of GLM concepts, such as restorative principles, into offender rehabilitation

programs appear to support higher levels of participant engagement but shows more limited

impact on recidivism (Mann, Webster, Schofield, and Marshall, 2004), especially when

compared to the evidence base for the RNR model.

Bridges to Life

Bridges to Life (BTL), the subject of this evaluation, is similarly guided by restorative

principles and emphasizes goods focused on responsibility, repentance, and restitution. BTL

started in 1999 in a single prison in Richmond, Texas. Since then, over 54,000 men and women

have graduated from the BTL program in 182 prisons and alternative facilities.

Participants are recruited from recruitment flyers posted by prison officials in dorms and

hallway bulletin boards as well as in the chapel. If interested, the men and women inmates then

sign up with the chaplain's office to take BTL. Participation is completely voluntary.

The program focuses on getting participants to truly understand the impact of their

actions through hearing firsthand from victims of crime. Over the course of the 14-

week program, a volunteer coordinator meets weekly with participants in two-hour small group

circles. Discussions focus on accountability, repentance, forgiveness, and reconciliation as well

as the use of stories, faith, and restitution in achieving these goals. In between sessions,

participants read the required materials and answer study questions to be discussed in the next

small group discussion.

The idea is that this approach will help engender empathy in the program participants, an important first step in learning how to accept responsibility for personal actions. Empathy training has been associated with prosocial behavior, the inhibition of aggression, and improved intergroup relations (Eisenberg, Eggum, and Giunta, 2010). Further, and in line with the orientation of BTL, the use of empathy measures that focus on understanding the emotions of others and feeling those emotions is among the factors shown to be efficacious in randomized controlled trials of empathy training programs (Teding van Berkhout and Malouff, 2016). In evaluating long-term effects of prisoner reentry services on recidivism, Visher and colleagues (2017) found that the types of services that proved to be most impactful included those that focused on individual change, as BTL does.

This paper reports on the results of a test of the effect of BTL on reincarceration. Using a quasi-experimental design, it compares reincarceration rates of Dallas area parolees who had participated in the BTL program with parolees who had not participated in the program. We test the hypothesis that participation in BTL lowers the risk of reincarceration.

METHOD

Data

To conduct this analysis, we requested from the Texas Department of Criminal Justice (TDCJ) a dataset of parolees who had completed the BTL program and were released in the Dallas area between September 1, 2014 through August 31, 2015. Two hundred ninety-nine individuals were identified as having met these criteria. Next, we asked for a dataset of all parolees released in the Dallas area during the same period who had not participated in BTL. TDCJ identified 7,622 parolees who met those criteria.

Two de-identified datasets, identical in structure, were created by the TDCJ and forwarded to the researchers on September 11, 2019. The datasets included the following variables:

- Information on the current incarceration (dates of entry and release, offense type)
- Criminal history (number and type of offenses, sex offender status, recidivism risk level)[2]
- Parolee personal information (gender, age, education, race/ethnicity, military service, marital status)
- Release information (release date, type of parole, parole special needs)[3]
- Recidivism information (date, conviction or parole violation, violent or non-violent offense)

Measurement

Dependent variable

Recidivism was defined as reincarceration in a Texas state prison on a new criminal conviction or parole violation. The TDCJ system does not track arrests or incarceration in local jails so these events were not included in our analysis. We tracked the prevalence of recidivism in the BTL and comparison group one year post-release and for the entire tracking period (3-3-1/2 years).[4] In addition, we tracked the elapsed time from release on parole until the reincarceration.

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[2] Recidivism risk is determined by the Texas Board or Pardons and Parole's Risk Assessment Instrument. It consists of both static (e.g., employment history, prior incarcerations) and dynamic factors (e.g., age, prison conduct). The two numbers are added together to produce a single numeric score: 3 points or less is considered low risk. 4-8 points is moderate risk, and 9-15 points is high risk.

[3] Type of parole is defined as Regular Parole (RP), Mandatory Parole Supervision (MS), or Discretionary Mandatory Parole Supervision (DMS). Special parole needs include medical or mental health needs, electronic monitoring, or sex offender requirements.

[4] In the dataset delivered to us by TDCJ, the control sample had a longer tracking period than the treatment sample. To equate time at risk, we omitted any reincarcerations in the control group after the date of the last reincarceration in the treatment group.

<u>Treatment variable</u>

The treatment variable is a dichotomous indicator coded 0 for those who did not participate in the BTL program and 1 for those who completed the program at some point prior to release from prison.[5]

Propensity Score Matching

A concern in attempting to assess the effects of an experimental treatment is whether the treatment groups are equivalent prior to applying the experimental treatment. While randomized experimental designs are the gold standard in determining treatment effects (Shadish, Cook, & Campbell, 2002), in this case, a true experimental design was impractical. Instead, we used propensity score matching (PSM) to reduce the bias in the estimation of treatment effects with observational datasets (Rosenbaum & Rubin, 1983). PSM calculates the odds for each respondent to belong to a treatment group with considerations of multiple covariates. Therefore, it is assumed that bias is reduced when the comparison of outcomes is performed using treated and control subjects who are as similar as possible (Morgan & Harding, 2006; Rosenbaum & Rubin, 1983). For the matching process, we used the information provided in the TDCJ dataset described above, including information on the current incarceration, criminal history, parolee personal information, and release information.

The first step in the PSM analysis was to build balanced treatment and comparison groups to ensure that two groups were as identical as possible based on the information provided in the dataset by TDCJ. The units were matched one-to-one through the nearest neighbor matching method with non-replacement and within a caliper of 0.05. Through this process, a dataset consisting of 296 cases each from both treatment and comparison groups was created.

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[5] We did not have information on inmates who might have started, but not completed the program. Based on conversations with BTL program staff, we believe this to be a very small number.

Table 1 presents the results of descriptive statistics for treatment and control groups before and after the matching. The results indicate that significant differences exist among four of the 15 variables before the matching. None of the variables showed a significant difference between treatment and comparison groups in the sample after matching.

TABLE 1 ABOUT HERE

Analysis Plan

The analysis included estimates of the prevalence of reincarceration using t-tests, logistic regression analysis, and survival analysis. The estimates derived from logistic regression provide odds of recidivism according to the level of treatment. Survival analysis, on the other hand, assesses the length of time offenders were at liberty before being reincarcerated (e.g., Benda, 2005; Kim & Clark, 2013).

In both types of analysis, the treatment variable and several control variables were entered in the statistical models to assess the effect of the intervention on recidivism rates and survival days. Based on empirical evidence from previous literature, gender, race, number of prior incarcerations, and recidivism risk level (low, medium, or high, as defined above) were considered in the model (Bales & Piquero, 2012; Kim & Clark, 2013; Piquero, Farrington, & Blumstein, 2003; Weisburd, Hasisi, Shoham, Aviv, & Haviv, 2017). Gender was defined as male or female. To measure race/ethnicity of offenders, three dichotomous race variables (Black, Hispanic, and Other) were created, with White as the reference category. Previous offending history, found to be the best predictor of future crime (Nagin, Cullen, & Jonson, 2009), was created by summing the prior offenses for which offenders had been sentenced to prison.

RESULTS

Table 2 presents the mean recidivism rates for both groups as well as the differences. At one year post-release, 2.0% of the BTL group had been reincarcerated compared to 4.4% of the comparison group. When examining reincarceration over the entire 3-3-1/2 year post-release period, we found that 21.3% of the Bridges to Life group had been reincarcerated compared to 26.7% of the comparison group. We also compared rates over the entire follow-up period for violent crime reincarcerations. Just 1.4% of BTL parolees were reincarcerated for a violent crime compared to 3.7% of the comparison group. While the percentage differences in reincarceration rates were substantial, tests of statistical significance for these differences ranged between .07 and .12, not quite at the .05 standard normally accepted as indicating a result that could reliably be replicated. We therefore conducted multivariate analyses using these same three outcome measures and introducing additional variables that could improve the precision of the tests for differences between treatment and comparison groups.

TABLE 2 ABOUT HERE

Table 3 shows the results of logistic regression models for reincarceration at one year, reincarceration over the entire tracking period, and reincarceration for a violent offense over the entire tracking period. Logistic regression increased the precision of the estimates of program impact by taking into account effects of the factors mentioned above that are known to affect the likelihood of recidivism.

The multivariate results indicated that program participation still did not show a significant effect on the recidivism rates one year post-release from prison. Adding the additional variables to the analysis dropped the significance level of the treatment variable sightly to .09. When looking at the entire follow-up period, the logistic regression analysis

produced a borderline significant treatment effect (OR=.0.70, p=.08). Similarly, the logistic

regression model produced a borderline significant treatment effect on reincarceration for

commission of a violent crime (OR=0.34, p=.07).

Another way to test for recidivism effects in a group of parolees is to look at the average

time it takes for them to be reincarcerated on a new offense. Similar to the logistic regression

models, the Cox regression model includes treatment and other covariates to assess the estimates.

For Cox regression, one assumption is that the ratio of hazard is consistent across different time

points. A proportional hazards test showed no evidence that this assumption was violated (global

test: chi² = 9.16, p > .05). The Cox regression model is presented in Table 4. It presents the

hazard ratios that represent a comparison between the probability of events in a treatment with

that of a comparison group. Table 4 shows a significant effect of the BTL program (HR= 0.71,

p=05). In other words, participating in the BTL program decreased the risk of reincarceration by

nearly 30 percent while holding other covariates constant. Those who participated in the BTL

program survived (stayed out of prison) on average 1,273 days from release compared to 1,234

days of survival for parolees in the comparison group.

TABLE 4 ABOUT HERE

Several of the covariates included in the models also exerted significant effects on

reincarceration. Parolees who had higher recidivism risk scores were more likely to be

reincarcerated during their first year at liberty (OR=2.41, p=.03), more likely to be incarcerated

at any point during the tracking period (OR= 1.88, p=.00) and likely to be returned to prison

sooner than persons with lower scores (HR=1.82, p=.00) Men were more likely than women to

be reincarcerated at some point during the tracking period (OR=2.44, p=.02) and likely to be

reincarcerated sooner (HR= 2.10, p=.03).[6] Blacks were less likely to be reincarcerated at some point during the tracking period than other racial groups (OR=0.52, p=.00) and likely to remain at liberty longer (HR=0.57, p=.00).

DISCUSSION

The results of this analysis generally support the proposition that participating in the BTL program is associated with lower rates of reincarceration. Treatment effects on time at liberty achieved statistical significance at the .05 level. Treatment effects on reincarceration during the first post-release year, reincarceration at any time during the tracking period for any reason, and reincarceration on a violent offense all hovered around the .05 level of statistical significance in multivariate modeling.

Both BTL participants and those in the comparison group had very low levels of reincarceration in the first year (2.0 percent and 4.4 percent, respectively). This is not surprising since typically, the court system takes many months to adjudicate felony offenses. Therefore, our recidivism events would be delayed by a matter of months compared to studies that define recidivism as a new arrest. Over the course of the longer 3-3-1/2 year period, both groups in our study had rates of reincarceration consistent with the 21% reincarceration rate over three years reported by the Texas Department of Criminal Justice.[7]

Other variables in the statistical analysis also were associated with differential rates of reincarceration. As expected, parolees who were female and those who had lower recidivism risk scores were less likely to be reincarcerated at some point during the tracking period. We

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[6] The violent crime analysis excluded gender from the model due to lack of variation due to the small number of violent crime incidents.

[7] Retrieved from
https://www.texascjc.org/system/files/publications/TCJC%20Testimony%20House%20Corrections%20%28Recidivism%20and%20Reentry%29.pdf

also found, unexpectedly, that black parolees had lower rates of reincarceration over the entire tracking period than white parolees. This finding is not in accord with published data from the Texas Department of Criminal Justice, which shows similar rates of reincarceration for parolees of all races.[8] We do not have an explanation for this finding.

There are several limitations that should be kept in mind in considering the results of our evaluation. First, given the source of the dataset, we were able to define recidivism only as a return to state prison. We did not have access to information on new arrests that were dismissed or resulted in a misdemeanor conviction. Rates of recidivism as measured by re-arrest and re-conviction are usually higher than those indicated by re-imprisonment. Since we do not have information on possible time spent in local jails, we cannot specify how pretrial detention or incarceration in local jails following misdemeanor convictions may have affected time at risk.

Second, the propensity score matching process we used reduces bias, but may not eliminate it. Individuals who choose to participate in BTL are self-selected. That being the case, it may be that BTL participants are more motivated to succeed upon release even before they enter BTL. Importantly, we also did not have any information on individuals' social support networks, the types of communities they returned to and whether they had access to additional programming or other types of programming on the outside. All of these variables can influence an individual's reentry success or failure in a way that is independent of their participation in BTL or which could have bolstered the effects of BTL.

These limitations, the borderline levels of statistical significance, and the anomalous findings on reincarceration rates by race all suggest caution in interpreting results of the study. Moreover, in exploratory analysis of the data, we noted indications that some subgroups may

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[8] www.lbb.state.tx.us/Documents/Publications/Policy_Report/4914_Recidivism_Revocation_Rates_Jan2019.pdf

benefit more from participation in BTL than others. It was not an objective of this study to breakdown program effects by different subgroups, and our sample was too small to generate the statistical power needed to carry out a formal analysis of program effects by subgroup. Our results provide preliminary support for BTL, but further research clearly is needed.

CONCLUSION

Consistent with the Good Lives Model (GLM), the focus of the Bridges to Life program is on restoration and the development of empathy. The program takes a positive, strengths-based approach rather than a risk, needs, and responsivity (RNR) approach. Our findings are consistent with other research showing effects of programs using GLM concepts (Mann, Webster, Schofield, and Marshall, 2004).

The reentry literature is clear that basic needs like living situations, employment, social support networks, drug programs, and community support are critical to reentry success (Huebner and Berg 2011). While BTL does not address these practical life requirements of parolees, it does provide skills that can provide parolees with skills that help them to cope with the many practical challenges that they face coming out of prison. The fact that we found that participation was associated with lower levels of reincarceration is all the more impressive given that BTL participation can occur at any time during incarceration; indeed, some of the offenders in the sample may have graduated from the program years prior to release. While practical life factors are important, the cognitive skills acquired from participation in BTL may help individuals develop attitudes and beliefs that make it easier to overcome the challenges of readjusting to life in society.

Table 1. Descriptive Statistics

	Before PSM (N=7,622)			After PSM (N=592)		
	Treatment	Control		Treatment	Control	
	Mean	Mean	t-value	Mean	Mean	t-value
Gender	0.89	0.89	0.21	0.89	0.86	1.12
Marital status	0.22	0.19	1.15	0.22	0.22	-0.2
College degree	0.15	0.10	2.45*	0.15	0.15	0.12
Black	0.42	0.39	0.94	0.42	0.42	-0.08
Hispanic	0.15	0.20	-1.94	0.15	0.18	-0.78
Military Service	0.06	0.06	0.17	0.06	0.07	-0.17
Total Incarcerations	1.77	1.68	1.56	1.77	1.86	-0.96
Age	32.52	32.02	0.81	32.53	33.51	-1.13
Sentence Length (days)	4836.50	3261.80	6.43**	4792.90	4338.80	1.21
Sex Offender Registration	0.01	0.03	-1.29	0.01	0.01	0.38
Recidivism Risk	1.71	1.84	-3.56**	1.71	1.66	0.94
Special Needs	0.32	0.34	-0.89	0.31	0.31	0
DMS+	0.14	0.32	-6.64**	0.14	0.13	0.36
MS++	0.003	0.01	-1.44	0.00	0.01	-0.58

Note. * $p < .05$; ** $p < .01$

+ Discretionary mandatory parole supervision

++ Mandatory parole supervision

Table 2. Prevalence of Reincarceration for Treatment and Comparison Group (N=592)

	Comparison	Treated	Difference	p
Reincarceration any reason 1 yr	4.4 %	2.0 %	2.4 %	.10
Reincarceration any reason total period	26.7 %	21.3 %	6.4 %	.12
Reincarceration for violent crime total period	3.7%	1.4%	2.3%	.07

Table 3. Logistic Regression Predicting Reincarceration for Treatment and Comparison Groups (N=592)

	1-year				Total period				Violent crime (total period)			
	Odds ratio	Std error	z	p	Odds ratio	Std error	z	p	Odds ratio	Std error	z	p
Treatment	0.43	0.22	-1.67	.09	0.69	0.14	-1.84	.07	0.34	0.20	-1.82	.07
Male	2.24	2.35	0.77	.44	2.44	0.93	2.36	.02	1 (omitted)			
Black	1.02	0.51	0.05	.96	0.52	0.11	-2.96	.00	1.71	0.98	0.94	.35
Hispanic	0.53	0.43	-0.78	.43	0.58	0.17	-1.85	.06	0.41	0.46	-0.80	.42

Total Incarcerations	1.15	0.22	0.74	.46	1.12	0.10	1.25	.21	0.85	0.27	-0.53	.60
Recidivism Risk	2.41	0.97	2.17	.03	1.88	0.33	3.60	.00	0.45	0.25	-1.45	.15
Constant	0.00	0.00	-4.49	.00	0.06	0.03	-5.97	.00	0.18	0.16	-1.90	.06
LR Chi2	11.97 (p=.06)				39.60 (p=.00)				10.49 (p=.06)			

Table 4. Cox Regression Model (N=592)

	Hazard. Ratio	Std. Err.	z-value	p
Treatment	0.71	0.12	-1.98	0.05
Male	2.10	0.73	2.14	0.03
Black	0.57	0.11	-3.04	0.00
Hispanic	0.69	0.17	-1.47	0.14
Total incarcerations	1.11	0.08	1.37	0.17
Recidivism risk	1.82	0.27	4.1	0.00
LR chi2 =	42.84 (p=.00)			

References

Andrews, D.A. and Bonta, J. (1995). The Level of Service InventoryRevised. Toronto: Multi-Health Systems

Andrew, D.A. and James Bonta. 2010. Rehabilitating criminal justice policy and practice. *Psychology, Public Policy, and Law,* 16(1): 39-55.

Andrews, D.A., James Bonta, and R.D. Hoge. 1990. Classification for effective rehabilitation: Rediscovering psychology. *Criminal Justice and Behavior,* 17: 19-52.

Andrews, D.A., James Bonta, and J. Stephen Wormith. 2011. The risk-need-responsivity (RNR) model: Does adding the good lives model contribute to effective crime prevention? *Criminal Justice and Behavior,* 38(7): 735-755.

Andrews, D.A., I. Zinger, R.D. Hoge, James Bonta, P. Gendreau, and Francis T. Cullen. 1990. Does correctional treatment work? A clinically relevant and psychologically informed meta-analysis. *Criminology,* 28: 369-404.

Benda, B. B. (2005). Gender differences in life-course theory of recidivism: A survival analysis. *International Journal of Offender Therapy and Comparative Criminology, 49*(3), 325-342.

Carson, E. Ann. 2020. *Prisoners in 2018.* Washington DC: Bureau of Justice Statistics, Office of Justice Programs, U.S. Department of Justice.

Clark, Valerie A. and Grant Duwe. 2015. An outcome evaluation of a prison-based life-skills program: The power of people. *International Journal of Offender Therapy and Comparative Criminology,* 59(4): 384-405.

Cullen, Francis T. 2013. Rehabilitation: Beyond nothing works. *Crime and Justice,* 42(1): 299-376.

Cullen, Francis T. and Paual Gendreau. 2001. From nothing works to what works: Changing professional ideology in the 21st Century. *The Prison Journal,* 81(3): 313-338.

Cullen, Francis T. and Cheryl L. Jonson. 2011. Rehabilitation and treatment programs. In (James Q. Wilson and Joan Petersilia, eds), *Crime and Public Policy.* New York: Oxford University Press.

Durose, Matthew R., Alexia D. Cooper, and Howard N. Snyder. 2014. *Recidivism of prisoners released in 30 states in 2005: Patterns from 2005-2010.* Washington DC: Bureau of Justice Statistics, Office of Justice Programs, U.S. Department of Justice.

Duwe, Grant and Valerie Clark. 2017. The rehabilitative ideal versus the criminogenic reality: The consequences of warehousing prisoners. *Corrections: Policy, Practice, and Research*, 2(1): 41-69.

Eisenberg, Nancy, Natalie D. Eggum, and Laura Di Giunta. 2010. Empathy-related responding: Associations with prosocial behavior, aggression, and intergroup relations. *Social Issues and Policy Review,* 4(1): 143-180.

Gaes, Gerald G. and Scott D. Camp. 2009. Unintended consequences: Experimental evidence for the criminogenic effect of prison security level placement on post-release recidivism. *Journal of Experimental Criminology,* 5: 139-162.

Holsinger, Alexander M., Christopher T. Lowenkamp, and Edward J. Latessa. 2003. Ethnicity, gender, and the Level of Service Inventory-Revised. *Journal of Criminal Justice,* 31(4): 309-320.

Jolley, M. (2018). Rehabilitating prisoners: The place of basic life skills programmes. *Safer Communities*, 17(1):1-10. DOI: 10.1108/SC-02-2017-0009.

Jonson, Cheryl L. and Francis T. Cullen. 2015. Prisoner reentry programs. *Crime and Justice,* 44(1): 517-575.

Kim, R. H., & Clark, D. (2013). The effect of prison-based college education programs on recidivism: Propensity score matching approach. *Journal of Criminal Justice, 41*(3), 196- 204.

Kurlychek, Megan and Cynthia Kempinen. 2006. Beyond boot camp: The impact of aftercare on offender reentry. *Criminology & Public Policy,* 5(2): 363-388.

Lattimore, Pamela K., Kelle Barrick, Alexander Cowell, Debbie Dawes, Danielle Steffey, Stephen Tueller, and Christy A. Visher. 2012. *Prisoner Reentry Services: What Worked for SVORI Evaluation Participants?* Final Report. Washington, DC: National Institute of Justice.

Lurigio, Arthur J. 2016. Jails in the United States: The "old-new" frontier in American corrections. *The Prison Journal*, 96(1): 3-9.

Lowenkamp, Christopher T. and Edward J. Latessa. 2002. *Evaluation of Ohio's Community Based Correctional Facilities and Halfway House Programs.* Technical Report. Ohio: Center for Criminal Justice Research, University of Cincinnati.

Lowenkamp, Christopher T., Edward J. Latessa, and Alexander M. Holsinger. 2006. The risk principle in action: What have we learned from 13,676 offenders and 97 correctional programs? *Crime and Delinquency,* 52: 77-93.

Mann, R.E., S.D. Webster, C. Schofield, and W.L. Marshall. 2004. Approach versus avoidance goals in relapse prevention with sexual offenders. *Sexual Abuse: A Journal of Research and Treatment,* 16: 65-75.

Matthews, Betsy, Dana Jones Hubbard, and Edward Latessa. 2001. Marking the next step: Using evaluability assessment to improve correctional programming. *The Prison Journal,* 81:454-472.

Martinson, Robert. (1974). What works? Questions and answers about prison reform. *The Public Interest,* 35: 22-54.

Mears, Daniel P. and Joshua C. Cochran. 2015. Prisoner Reentry in the Era of Mass Incarceration. California: Sage Publications.

Mijs, Jonathan J.B. 2016. The missing organizational dimension of prisoner reentry: An ethnography of the road to reentry at a nonprofit service provider. *Sociological Forum* 31(2), 291-309.

Morgan, S. L., & Harding, D. J. (2006). Matching estimators of causal effects: Prospects and pitfalls in theory and practice. *Sociological methods & research, 35*(1), 3-60.

Nagin, D. S., Cullen, F. T., & Jonson, C. L. (2009). Imprisonment and reoffending. *Crime and justice, 38*(1), 115-200.

Ndrecka, Mirlinda. 2014. *The Impact of Reentry Programs on Recidivism: A Meta-Analysis*. PhD Dissertation. Ohio: University of Cincinnati, School of Criminal Justice.

Petersilia, Joan. 2003. When Prisoners Come Home: Parole and Prisoner Reentry. New York: Oxford University Press.

Piquero, A. R., Farrington, D. P., & Blumstein, A. (2003). The criminal career paradigm. Crime and justice, 30, 359-506.

Rhine, Edward E. and Anthony C. Thompson. 2011. The reentry movement in corrections: Resiliency, fragility, and prospects. *Criminal Law Bulletin,* 47(2): 147.

Rosenbaum, P. R., & Rubin, D. B. (1983). The central role of the propensity score in observational studies for causal effects. *Biometrika, 70*(1), 41-55.

Seiter, Richard P. and Karen R. Kadela. 2003. Prisoner reentry: What works, what does not, and what is promising. *Crime and Delinquency,* 49: 360-388.

Shadish, W. R., Cook, T. D., & Campbell, D. T. (2002). *Experimental and quasi-experimental designs for generalized causal inference*. Boston: Houghton Mifflin.

Teding van Berkhout, E. and J.M. Malouff. 2016. The efficacy of empathy training: A meta-analysis of randomized controlled trials. *Journal of Counseling Psychology,* 63(1): 32-41.

Travis, Jeremy. 2007. Reflections on the reentry movement. *Federal Sentencing Reporter*, 20(2): 84-87.

Visher, Christy A. 2007. Returning home: Emerging findings and policy lessons about prisoner reentry. *Federal Sentencing Reporter*, 20(2): 93-102.

Visher, Christy A., Pamela K. Lattimore, Kelle Barrick and Stephen Tueller. 2017. Evaluating the long-term effects of prisoner reentry services on recidivism: What types of services matter? *Justice Quarterly,* 34(1): 136-165.

Vose, Brenda, Francis T. Cullen, and Paula Smith. 2008. The empirical status of the Level of Service Inventory. *Federal Probation,* 72(3): 22.

Wacquant, Loïc. 2010. Prisoner reentry as myth and ceremony. *Dialectical Anthropology,* 34: 605-620.

Ward, T. and M. Brown. 2004. The good lives model and conceptual issues in offender rehabilitation. *Psychology, Crime, & Law,* 10: 243-257.

Ward, T., and Theresa A. Gannon. 2008. Goods and risks: Misconceptions about the good lives model. *Correctional Psychologist,* 30: 4-5.

Ward, T., Ruth E. Mann, and Theresa Gannon. 2007. The good lives model of offender rehabilitation: Clinical implications. *Aggression and Violent Behavior,* 12: 87-107.

Weisburd, David, David P. Farrington and Charlotte Gill. 2017. What works in crime prevention and rehabilitation: An assessment of systematic reviews. *Criminology and Public Policy,* 16(2): 415-449.

Weisburd, D., Hasisi, B., Shoham, E., Aviv, G., & Haviv, N. (2017). Reinforcing the impacts of work release on prisoner recidivism: The importance of integrative interventions. Journal of Experimental Criminology, 13(2), 241-264.

Whiteacre, Kevin W. 2006. Testing the Level of Service Inventory-Revised (LSI-R) for racial/ethnic bias. *Criminal Justice Policy Review,* 17(3): 330-342.

Willis, Gwenda M. and Tony Ward. 2013. The good lives model: Does it work? Preliminary evidence. 2013. In (Craig, Leam A., Dixon, L, Gannon, Theresa A., eds), *What Works in Offender Rehabilitation: An Evidence-Based Approach to Assessment and Treatment.* New York: John Wiley & Sons

Wilson, David B. 2016. Correctional programs. In (Weisburd D.,. Farrington D., Gill C., eds), *What Works in Crime Prevention and Rehabilitation: Lessons From Systematic Reviews.* New York: Springer.