



The Effectiveness of Education and Employment Programming for Prisoners

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Executive Summary

Inmates in American prisons are undereducated and underemployed. Compared to adults in the US, prisoners are at least three times more likely to be without a high school or general educational development (GED) diploma and four times less likely to have a postsecondary degree. Studies have consistently found that unemployment rates for prisoners, both before and after prison, are as high as 65 percent. And, even among those who are able to find a job, relatively few achieve consistent full-time employment.

Would increasing prisoner access to programming lead to greater educational attainment and more employment? And, if US prison systems could improve educational and employment outcomes for prisoners, to what extent would it reduce prison misconduct and recidivism? This report addresses these questions by reviewing the available evidence on the effectiveness of education and employment programming for prisoners.

Prison-based education programming generally includes adult basic education, which focuses on helping inmates earn a secondary degree, as well as postsecondary education opportunities such as career/technical program certificates, associate degrees, and even bachelor's degrees. The literature indicates that, on the whole, prison-based education programming improves postprison employment, reduces prison misconduct and recidivism, and delivers a strong return on investment (ROI). Recent research suggests that postsecondary education programming, in particular, may be more effective in improving employment and recidivism outcomes. Although education

programming only modestly reduces recidivism, it has generated relatively large cost-avoidance estimates by delivering low-cost programming to a large volume of offenders.

While inmates are confined, the primary type of employment programming is prison labor. Community-based programs such as work release are often available for inmates following their release from prison. Despite having little or no effect on recidivism, participation in prison labor has generally been found to improve prison misconduct and postprison employment outcomes. Work release has also been found to increase employment for released prisoners, and it has demonstrated the ability to reduce recidivism, albeit modestly. While prison labor and work release each deliver a positive ROI, employment programs that offer a continuum-of-service delivery from prison to the community have produced the most promising employment, recidivism, and ROI results.

Significantly expanding the delivery of education and employment programming would be limited by (1) the lack of physical space to provide interventions in many correctional facilities and (2) the fact that many prisoners have brief stays in prison that preclude participation in programming. Still, better education, employment, and public-safety outcomes for prisoners could be achieved by further enhancing employer incentives to hire individuals with criminal records, fully restoring prisoner Pell Grant eligibility, and ensuring that more employment interventions provide a continuum-of-service delivery from prison to the community.

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When individuals enter prison, approximately two-fifths do not have a high school degree or general educational development (GED) diploma.¹ With recent data showing that 12 percent of adults lack a secondary degree,² the rate for US prisoners is more than three times higher. But the disparity between prisoners and the rest of the population appears to be even greater for postsecondary education. Among adults in the US, 42 percent have an associate degree or more,³ which is more than four times higher than for prisoners.⁴

Data have long shown that increases in educational attainment are associated with less unemployment and higher earnings.⁵ Regardless of their educational attainment, however, the employment prospects for released prisoners are already weakened due to the stigmatizing effects of a felony record.⁶ Research has further indicated that many prisoners have unstable work histories.⁷ Perhaps it is no surprise, then, that we see relatively high unemployment rates for individuals both before and after their time in prison.

A handful of studies have shown that pre-prison employment rates (in the year before coming to prison) for prisoners are no higher than 35 percent.⁸ These studies have generally found that post-release employment rates increased shortly after prisoners were released from prison but later declined,⁹ eventually returning to pre-prison employment levels within a few years.¹⁰ The most recent study on postprison employment for released prisoners found that nearly two-thirds did not find a job (or at least one with an

employer who reported it to the unemployment insurance system) in their first two and half years after release from prison. And, even among the minority of prisoners who found employment after release, relatively few achieved consistent full-time employment.¹¹

The evidence is clear that prisoners tend to be undereducated and underemployed. What if US prison systems placed a greater emphasis on improving educational and employment outcomes for prisoners? Would it improve other outcomes such as recidivism or prison misconduct? If so, to what extent? And, if US prison systems invested in more education and employment programming, would the benefits outweigh the costs?

This report addresses these questions by providing an overview of the available evidence on the effectiveness of education and employment programming. In the following section, I begin by briefly reviewing the risk and protective factors for recidivism. Next, I review the bodies of research on education programming and employment programming. I conclude by summarizing the evidence on the effectiveness of education and employment programming and offering recommendations for correctional policy and practice.

Education and Employment: Risk Factors for Recidivism

Prior research has categorized recidivism risk factors as major, moderate, and minor.¹² The four major risk factors for recidivism—known as the “Big

Four”—include a history of antisocial behavior (i.e., criminal history), antisocial personality pattern, criminal thinking, and antisocial peers. Of the Big Four, the only static risk factor is criminal history, which also happens to be the strongest predictor of recidivism.¹³ Education and employment have been identified as moderate risk factors, which also include family/marital, leisure/recreation, and substance abuse. Minor risk factors, which have relatively little impact on recidivism risk, include major mental disorders, low IQ, and social class.¹⁴

Given that education and employment are moderate recidivism risk factors for offenders,¹⁵ it may be unreasonable to expect these programs to produce large reductions in recidivism. Moreover, even though education and employment interventions each address a criminogenic need (or recidivism risk factor), offenders often have multiple areas of need that contribute to their recidivism risk. Still, as the review of the literature indicates below, participation in education and employment programming can improve institutional and postprison outcomes.

Education Programming

Prison-based education programming includes adult basic education (ABE), which generally focuses on helping inmates earn a secondary degree. Some prison systems also provide postsecondary education opportunities, such as career/technical program certificates, associate degrees, and even bachelor's degrees, for inmates who have a GED or high school degree. More recently, in a handful of states, prisoners have been able to participate in seminary (or Bible college) programs, which are similar to bachelor's degree programs.¹⁶

As interest in reforming the nation's prison systems has recently grown, so have efforts to increase prisoner access to education programming. In 2014, New York Gov. Andrew Cuomo offered, but later withdrew, a proposal that would have used a portion of the state's corrections budget to finance college courses for prisoners. The following year, the US Department of Education launched a pilot program to

provide prisoners with access to federal aid for postsecondary education, which Congress had eliminated in 1994.

Notwithstanding these recent efforts to increase postsecondary educational opportunities for prisoners, education has long been a staple of prison-based programming. The prevalence of education programming in prisons is likely due, at least in part, to the well-documented relationship between low educational achievement and antisocial behaviors. Several studies have linked poor academic performance among adolescents to juvenile delinquency and future offending, although the direction of the causal relationship remains unclear.¹⁷

In general, the literature on the effectiveness of prison-based education programming has looked at its impact on the following outcomes: prison misconduct, postprison employment, recidivism, and return on investment (ROI). A correctional program can produce a positive ROI by generating benefits (the return) that exceed the costs (the investment) to operate the program. An intervention that lowers recidivism can create cost-avoidance benefits by decreasing victim costs, criminal justice system costs (including police, courts, and prisons), and lost productivity of incarcerated offenders. Programs that improve employment incomes can also create a benefit by increasing income taxes that employed offenders pay to the state.

In reviewing the effects of education programming on prison misconduct, the literature has yielded somewhat inconsistent results. A meta-analysis published in 2006 reported that educational/vocational programming was not associated with a decrease in discipline infractions.¹⁸ More recent studies have found, however, that participation in education programming reduces misconduct. Time spent in educational/vocational programming has been shown to decrease nonviolent misconduct.¹⁹ An evaluation of a prison Bible college in Texas reported that participation in the program produced large reductions in misconduct.²⁰ Moreover, one of the largest evaluations of prison-based education programming to date found that completion of education courses was associated with less misconduct.²¹

The impact of education programming on post-prison employment has been consistently positive. The most recent meta-analysis found that participating in education programming increased the odds of post-release employment by 13 percent.²² A study on Florida prisoners found that education programming improves post-release employment outcomes.²³ In a study on Minnesota prisoners, researchers found that while obtaining a secondary degree in prison significantly increased the odds of securing post-release employment by 59 percent, it did not have a significant effect on other employment measures such as hourly wage, total hours worked, and total wages earned. Earning a postsecondary degree in prison, on the other hand, was associated with a greater number of hours worked and higher overall wages.²⁴

The literature has generally found that prison-based education programming reduces recidivism, although the effect sizes have typically been modest. A review of more than 90 studies on prison education programs revealed that prison education reduces the likelihood of recidivism, especially for offenders with the largest education deficits.²⁵ A meta-analysis of 33 evaluations of prison-based education programs found these programs lowered recidivism by 11 percent.²⁶ A meta-analysis by the Washington State Institute for Public Policy showed that prison-based ABE programming lowered recidivism by more than 5 percent, and prison-based vocational programs reduced it by more than 12 percent.²⁷ In 2013, the most recent meta-analysis by the RAND Corporation found that participation in education programming decreased the odds of recidivism by 43 percent.²⁸

Since the publication of the RAND meta-analysis, at least four rigorous studies have evaluated the impact of prison-based education programming on recidivism. Although a 2013 study of Florida prisoners did not find that education programming decreases recidivism,²⁹ an evaluation of New York prisoners published that same year showed that prison-based college education programs significantly reduced recidivism.³⁰ Likewise, a 2014 study on Minnesota prison-based education programming found that while obtaining a secondary degree in prison did not

lower recidivism, earning a postsecondary degree significantly reduced it by at least 16 percent.³¹ The most recent study showed that secondary and postsecondary education programming reduced recidivism for Ohio prisoners who completed the program or course.³²

The most recent meta-analysis found that participating in education programming increased the odds of post-release employment by 13 percent.

Even though the recidivism effect sizes for education programming have not been large, education programming has generated impressive cost-avoidance estimates. A 2013 study from Washington State reported an ROI of \$19.62 for prison-based correctional education (basic and postsecondary) and \$13.21 for vocational education.³³ In other words, for every dollar spent on prison-based correctional education and vocational education, these interventions have delivered cost-avoidance benefits of \$19.62 and \$13.21, respectively. Another study on Minnesota prisoners found that for every dollar spent on secondary and postsecondary education interventions, these programs generated \$3.69 in cost-avoidance benefits. Moreover, due to a high level of prisoner enrollment, education programming generated the second-highest cost-avoidance estimate (\$3.2 million) among more than a dozen Minnesota prison-based programs that had been evaluated.³⁴

Overall, prison-based education programming improves postprison employment, reduces prison misconduct and recidivism, and delivers a strong

ROI. Recent research suggests that postsecondary education programming may be more effective in improving employment and recidivism outcomes.

Employment Programming

Existing research suggests that work is a protective factor against crime and, more narrowly, recidivism.³⁵ While it is important for offenders to obtain employment following their release from prison, maintaining it appears to be crucial in reducing recidivism.³⁶ Indeed, individuals are less likely to commit crime when they work more often³⁷ and have employment that is stable,³⁸ considered satisfying,³⁹ and perceived as having career potential.⁴⁰

Given the difficulties released prisoners often face in finding a job, prison systems frequently provide inmates with employment programming, which includes prison labor opportunities and participation in programs such as work release. Work release allows participants, who are usually near the end of their prison terms, to work in the community and return to a correctional or community residential facility during nonworking hours. In doing so, work release provides offenders with a stable residence in a controlled environment, and it gives them opportunities to earn income and accumulate savings for their eventual release.

Because employment programs such as work release are based in the community, research examining the effects of employment programming on institutional misconduct has been limited mostly to prison labor. In general, this research indicates that prison employment is associated with less misconduct.⁴¹ Results from a study on the Federal Bureau of Prisons' Post Release Employment Project (PREP) found that it significantly reduced misconduct.⁴² In addition, a 2014 study reported that the number of hours spent per week in a work assignment was negatively associated with both violent and nonviolent misconduct.⁴³

The most recent study on prison labor, however, yielded mixed results. Using a retrospective quasi-experimental design to assess the impact of

prison labor on institutional misconduct, postprison employment, and recidivism among 6,144 offenders released from Minnesota prisons between 2007 and 2011, this study found that participation in prison labor did not produce an overall decrease in misconduct. Positive effects were observed, however, for those who spent a greater proportion of their overall confinement time working at a job in prison.⁴⁴

The effects of employment programming on postprison employment outcomes have been consistently positive. The aforementioned evaluation of the PREP program found that prison employment increased postprison employment by 14 percent.⁴⁵ In an evaluation of the Affordable Homes Program (AHP), a prison work crew program that trains Minnesota prisoners in the construction trade, researchers indicated that AHP participants did have significantly higher odds of gaining employment in a construction-related field than members of the comparison group, but they did not have significantly higher odds of gaining employment in "any field."⁴⁶ The recent evaluation of prison labor in Minnesota showed that it not only improved the odds of obtaining postprison employment but also led to increases in hours worked and wages earned.⁴⁷

Among the three evaluations of work release programs that examined employment outcomes, each one reported positive results. One study found that work release participants had higher employment rates than offenders in the control group,⁴⁸ while another showed, on the basis of self-report data, that work release participants had higher employment rates and greater overall earnings than offenders in the comparison group.⁴⁹ In a 2015 evaluation of Minnesota's work release program, the findings indicated that while work release did not affect hourly wage, it significantly increased the odds that participants found a job, the total hours they worked, and the total wages they earned.⁵⁰

The effects of employment programming on recidivism have been mixed, although more positive results have been observed for work release programs. Although the PREP program evaluation found that it lowered recidivism,⁵¹ other studies have reported that prison labor does not have a significant impact

on reoffending. An evaluation of New York's Prison Industry Research Project showed little difference in recidivism between offenders who worked in prison industries and those who did not.⁵² A recent evaluation of UNICOR, the federal prison industry program, indicated it did not reduce recidivism among female prisoners.⁵³ The evaluation of Minnesota's AHP program, as discussed above, showed it had no effect on recidivism.⁵⁴ Likewise, the Minnesota study on prison labor found it had little overall impact on recidivism, although the results suggested that recidivism outcomes were better for prisoners who were employed for much of their imprisonment.⁵⁵

The findings from work release evaluations indicate it has, at best, a modest effect on recidivism. The two studies that used a randomized experimental design did not find that work release reduced recidivism. Of the seven evaluations using a quasi-experimental design, four found that work release significantly decreased recidivism.⁵⁶ For example, one of these evaluations matched 3,913 offenders who did not participate in Washington's work release program with 11,413 program participants. The results showed the program produced a statistically significant, albeit modest, reduction in recidivism.⁵⁷ Similarly, an evaluation of Minnesota's work release program found that it significantly reduced the risk of reoffending with a new crime by 14–16 percent.⁵⁸

Cost-benefit analyses have estimated an ROI of \$4.74 for prison labor. Among employment programming that is more community oriented, such as work release, the results show an ROI of \$11.19 and a benefit of nearly \$6,900 per participant.⁵⁹ In the evaluation of Minnesota's work release program, which included a cost-benefit analysis, the findings revealed a cost avoidance of nearly \$700 per participant for a total of \$350,000 annually.⁶⁰

Despite having little or no effect on recidivism, participation in prison labor generally improves prison misconduct and postprison employment outcomes. Work release has also been found to increase employment for released prisoners, and it has demonstrated the ability to reduce recidivism, albeit modestly. Due to the stronger effect on recidivism, work release has generated a larger ROI.

A Promising Model for Employment Programming. Much of the employment programming provided to prisoners is delivered exclusively in the institution, such as prison labor, or in the community, such as work release. In contrast to existing employment programs, the evaluation of Minnesota's EMPLOY program offers an example where services are delivered to participants in both the institution and the community.⁶¹

Approximately 60–90 days before their release from prison, EMPLOY participants begin meeting with a job-training specialist to address issues such as skills assessments, resumes, job-search techniques, and interviewing skills. The week before a participant is released from prison, a job-development specialist begins searching for job leads based on the participant's vocational skills and calling employers who are known to hire ex-offenders. As soon as participants are released from prison, a retention specialist provides participants with a portfolio that contains copies of their resumes, any certifications submitted to EMPLOY, job leads, and any additional resources or tools to assist them with their job search. After this initial meeting, the retention specialist maintains contact with each participant during the first year after release and continues to help the participant with job leads and resume maintenance. Given that EMPLOY begins providing programming to participants three months before their release from prison and continues to offer assistance for up to one year after release, this intervention provides a continuum-of-service delivery from the institution to the community.

Results from the EMPLOY evaluation showed that it significantly increased employment and decreased reoffending. Compared to their comparison group counterparts, participants were more likely to not only find a job after their release from prison but also maintain their employment, resulting in more total wages earned. As a result, participation in EMPLOY produced a relatively large reduction in recidivism, decreasing it from 32 to 63 percent.⁶² Due to the impact on post-prison employment and recidivism, the findings from a cost-benefit analysis indicate EMPLOY has generated an ROI of \$6.45, which is worth \$2.8 million in costs avoided annually.⁶³

Improving Employment Outcomes

A common assumption is that the best, and perhaps only, way to improve employment outcomes for correctional populations is to increase their access to education and employment programming. But a recent study on 15,111 offenders released from Minnesota prisons between 2007 and 2010 showed that other interventions, such as substance abuse treatment, prison visitation, and cognitive-behavioral therapy, also produced positive employment outcomes. In addition, the findings showed that when prisoners participated in more interventions, it significantly improved their chances of finding a job, hours worked, and wages earned.⁶⁴

This study suggests that a released prisoner's employability may be affected by not only his or her educational attainment and prior work experience (the strongest predictor of postprison employment) but also issues such as criminal thinking, chemical dependency, and access to social capital. More to the point, released prisoners' ability to find and maintain a job is affected by their sobriety and whether they have a social support network on which they can rely for potential job opportunities. Therefore, programming that addresses risk factors besides education and employment can also yield positive postprison employment outcomes.

The results from this study also help explain why interventions such as substance abuse treatment have been found to be effective.⁶⁵ The success of substance abuse treatment in reducing recidivism has generally been tied to its effectiveness in addressing antisocial thinking and chemical dependency. But improving post-release employment outcomes for prisoners may be another reason for its effectiveness. Better postprison employment outcomes may also help clarify why an intervention like prison visitation is associated with reduced recidivism.⁶⁶

Conclusion and Recommendations

The academic literature shows that education and employment programming are cost-effective

interventions that produce positive outcomes. Both types of programming have consistently improved employment outcomes. Although there have been exceptions, education and employment programming have shown the ability to reduce prison misconduct. Recidivism is the one outcome, however, for which neither intervention has consistently delivered strong results.

Instead, the evidence suggests there may be certain conditions in which education and employment programming are more likely to reduce recidivism. For example, with education programming, we generally see better recidivism outcomes for prisoners who earn postsecondary degrees or certificates. With employment programming, work release has produced modest reductions in recidivism, while prison labor may effectively decrease reoffending only when it is delivered in high dosages (i.e., prisoners are employed during much of their confinement). The most promising model to reduce recidivism, however, may be employment programs that offer a continuum-of-service delivery from prison to the community.

If education and employment programming are effective interventions that deliver a positive ROI, then why not provide more of these programs for prisoners? To be sure, US prison systems could undoubtedly increase the extent to which they provide education and employment programming. Still, there are obstacles that would limit the expansion of programming. Many correctional facilities, which were designed and built decades ago with security interests in mind, lack the physical space needed to accommodate additional programming. Moreover, given that roughly two-thirds of all prison admissions are probation or parole violators, many prisoners have relatively short lengths of stay that preclude participating in an employment or education program, much less earning a certificate or degree.

These obstacles notwithstanding, there are several ways in which correctional policy and practice could be improved to achieve better education, employment, and public-safety outcomes. Most notably, while the recent pilot project to provide prisoners with federal aid for education is a step in the right direction, Congress could consider fully

reinstating Pell Grant eligibility for prisoners due to the observed effectiveness of postsecondary education programming. Granted, some may reject the notion of helping prisoners become more educated on the grounds that criminals would be treated better than law-abiding citizens. While this is a valid concern, it is also true that the US spends an estimated \$40 billion annually on prisons.⁶⁷ Not only would increasing prisoner access to education and employment programming be less costly over the long run, but the reduction in public spending on crime and prisons could also be reinvested in other areas such as education and health care.

Given the promising results from Minnesota's EMPLOY program, employment interventions for prisoners should provide a continuum-of-service delivery from prison to the community, which is a common thread running through other effective correctional programs.⁶⁸ Service delivery systems for correctional populations are typically fragmented and isolated, often due to a lack of communication and coordination among those who provide programming to offenders during and after confinement. Programs that offer a continuum-of-service delivery can help foster a more seamless transition from the institution to the community.

But even if prisoners become better educated and participate in more effective programming, they would still face significant barriers in obtaining stable, long-term employment. While recent efforts to enhance the bleak job prospects for the formerly imprisoned have focused on removing questions about criminal history from initial job application forms, it remains to be seen whether "ban the box" has led to better employment outcomes for those

with criminal records. Strategies that have shown some promise include employer incentives for hiring individuals with criminal records, such as tax credits and fidelity bonds. It may be worth exploring whether increasing these incentives would improve the odds that former prisoners can find work.

At an even broader level, however, it should be better understood that the educational and employment deficits for prisoners begin well before they enter prison. Indeed, the strongest predictor of whether prisoners will find work after their release is whether they were employed during the year before their admission to prison.⁶⁹ Moreover, individuals from disadvantaged communities are disproportionately more likely to enter the prison system. Closing the educational and employment achievement gaps observed in these communities would likely lead to better postprison employment outcomes. More important, however, it could also prevent individuals from ever going to prison in the first place.

About the Author

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Notes

1. Grant Duwe and Valerie Clark, "The Effects of Prison-Based Educational Programming on Recidivism and Employment," *Prison Journal* 94, no. 4 (September 2014): 454-78.
2. Camille L. Ryan and Kurt Bauman, *Educational Attainment in the United States: 2015*, US Census Bureau, March 2016, <https://www.census.gov/content/dam/Census/library/publications/2016/demo/p20-578.pdf>.
3. Ryan and Bauman, *Educational Attainment in the United States*.
4. Duwe and Clark, "The Effects of Prison-Based Educational Programming on Recidivism and Employment."
5. US Bureau of Labor Statistics, *Current Population Survey*, 2018, https://www.bls.gov/emp/ep_chart_001.htm.
6. Jared Bernstein and Ellen Houston, *Crime and Work: What We Can Learn from the Low-Wage Labor Market* (Washington, DC: Economic Policy Institute, 2000).
7. Christy Visser, Nancy La Vigne, and Jeremy Travis, *Returning Home: Understanding the Challenges of Prisoner Reentry*, Urban Institute, Justice Policy Center, January 2004, <https://www.urban.org/sites/default/files/publication/42841/410974-Returning-Home-Understanding-the-Challenges-of-Prisoner-Reentry.PDF>.
8. Grant Duwe and Valerie Clark, "Nothing Will Work Unless You Did: The Predictors of Postprison Employment," *Criminal Justice and Behavior* 44, no. 5 (February 2017): 657-77; Jeffrey Kling, "Incarceration Length, Employment, and Earnings," *American Economic Review* 96, no. 3 (June 2006): 863-76; Robert Lalonde and Rosa Cho, "The Impact of Incarceration in State Prison on the Employment Prospects of Women," *Journal of Quantitative Criminology* 24, no. 3 (September 2008): 243-65; Becky Pettit and Christopher Lyons, "The Consequences of Incarceration on Employment and Earnings: Evidence from Washington State" (working paper, University of Washington, Seattle, WA, 2002); and William Sabol, "Local Labor-Market Conditions and Postprison Employment Experiences of Offenders Released from Ohio State Prisons," in *Barriers to Reentry? The Labor Market for Released Prisoners in Post-Industrial America*, eds. Shawn Bushway, Michael Stoll, and David Weiman (New York: Russell Sage Foundation, 2007), 257-303.
9. Lalonde and Cho, "The Impact of Incarceration in State Prison on the Employment Prospects of Women."
10. Kling, "Incarceration Length, Employment, and Earnings"; Pettit and Lyons, "The Consequences of Incarceration on Employment and Earnings"; and Sabol, "Local Labor-Market Conditions and Postprison Employment Experiences of Offenders Released from Ohio State Prisons."
11. Duwe and Clark, "Nothing Will Work Unless You Did."
12. Don Andrews, James Bonta, and Stephen Wormith, "The Recent Past and Near Future of Risk and/or Need Assessment," *Crime & Delinquency* 52, no. 1 (January 2006): 7-27.
13. Grant Duwe, "The Development, Validity, and Reliability of the Minnesota Screening Tool Assessing Recidivism Risk (MnSTARR)," *Criminal Justice Policy Review* 25, no. 5 (2014): 579-613.
14. Andrews, Bonta, and Wormith, "The Recent Past and Near Future of Risk and/or Need Assessment."
15. Andrews, Bonta, and Wormith, "The Recent Past and Near Future of Risk and/or Need Assessment."
16. Grant Duwe et al., "Bible College Participation and Prison Misconduct: A Preliminary Analysis," *Journal of Offender Rehabilitation* 54 (2015): 371-90.
17. David Farrington, "Childhood Origins of Antisocial Behavior," *Clinical Psychology & Psychotherapy* 12, no. 3 (May 2005): 177-90; and Terrie Moffitt, "Adolescence-Limited and Life-Course-Persistent Antisocial Behavior: A Developmental Taxonomy," *Psychological Review* 100, no. 4 (1993): 674-701.
18. Sheila French and Paul Gendreau, "Reducing Prison Misconducts: What Works!," *Criminal Justice and Behavior* 33, no. 2 (2006): 185-218.
19. Ben Steiner and John Wooldredge, "Sex Differences in the Predictors of Prisoner Misconduct," *Criminal Justice and Behavior* 41, no. 4 (2014): 433-52.
20. Duwe et al., "Bible College Participation and Prison Misconduct."

21. Amanda Pompoco et al., "Reducing Inmate Misconduct and Prison Returns with Facility Education Programs," *Criminology & Public Policy* 16, no. 2 (May 2017): 515–47.
22. Lois M. Davis et al., *Evaluating the Effectiveness of Correctional Education: A Meta-Analysis of Programs That Provide Education to Incarcerated Adults*, RAND Corporation, 2013, https://www.rand.org/pubs/research_reports/RR266.html.
23. Rosa Cho and John Tyler, "Does Prison-Based Adult Basic Education Improve Postrelease Outcomes for Male Prisoners in Florida?," *Crime & Delinquency* 59, no. 7 (October 2013): 975–1005.
24. Duwe and Clark, "The Effects of Prison-Based Educational Programming on Recidivism and Employment."
25. Kenneth Adams et al., "A Large-Scale Multidimensional Test of the Effect of Prison Education Programs on Offenders' Behavior," *Prison Journal* 74, no. 4 (1994): 433–49.
26. David Wilson, Catherine Gallagher, and Doris MacKenzie, "A Meta-Analysis of Corrections-Based Education, Vocation, and Work Programs for Adult Offenders," *Journal of Research in Crime and Delinquency* 37, no. 4 (November 2000): 347–68.
27. Steve Aos, Martha Miller, and Elizabeth Drake, "Evidence-Based Adult Corrections Programs: What Works and What Does Not," Washington State Institute for Public Policy, January 2006, http://www.wsipp.wa.gov/ReportFile/924/Wsipp_Evidence-Based-Adult-Corrections-Programs-What-Works-and-What-Does-Not_Preliminary-Report.pdf.
28. Davis et al., *Evaluating the Effectiveness of Correctional Education*.
29. Cho and Tyler, "Does Prison-Based Adult Basic Education Improve Postrelease Outcomes for Male Prisoners in Florida?"
30. Ryang Kim and David Clark, "The Effect of Prison-Based College Education Programs on Recidivism: Propensity Score Matching Approach," *Journal of Criminal Justice* 41, no. 3 (2013): 196–204.
31. Duwe and Clark, "The Effects of Prison-Based Educational Programming on Recidivism and Employment."
32. Pompoco et al., "Reducing Inmate Misconduct and Prison Returns with Facility Education Programs."
33. Steve Aos and Elizabeth Drake, "Prison, Police and Programs: Evidence-Based Options That Reduce Crime and Save Money," Washington State Institute for Public Policy, November 2013, http://www.wsipp.wa.gov/ReportFile/1396/Wsipp_Prison-Police-and-Programs-Evidence-Based-Options-that-Reduce-Crime-and-Save-Money_Full-Report.pdf.
34. Grant Duwe, *What Works with Minnesota Prisoners: A Summary of the Effects of Correctional Programming on Recidivism, Employment and Cost Avoidance*, Minnesota Department of Corrections, 2013.
35. Torbjorn Skardhamar and Kjetil Telle, "Post-Release Employment and Recidivism in Norway," *Journal of Quantitative Criminology* 28, no. 4 (2012): 629–49.
36. Duwe and Clark, "The Effects of Prison-Based Educational Programming on Recidivism and Employment."
37. Christopher Uggen, "Ex-Offenders and the Conformist Alternative: A Job Quality Model of Work and Crime," *Social Problems* 46, no. 1 (February 1999): 127–51.
38. Robert Crutchfield and Susan Pitchford, "Work and Crime: The Effects of Labor Stratification," *Social Forces* 76, no. 1 (September 1997): 93–118.
39. Uggen, "Ex-Offenders and the Conformist Alternative."
40. Jessica Huiras, Chris Uggen, and Barbara McMorris, "Career Jobs, Survival Jobs, and Employee Deviance: A Social Investment Model of Workplace Misconduct," *Sociological Quarterly* 41, no. 2 (2000): 245–63.
41. Angela Gover, Deanna Pérez, and Wesley Jennings, "Gender Differences in Factors Contributing to Institutional Misconduct," *Prison Journal* 88, no. 3 (2008): 378–403.
42. William Saylor and Gerald Gaes, "Training Inmates Through Industrial Work Participation and Vocational Apprenticeship Instruction," *Corrections Management Quarterly* 1, no. 2 (Spring 1997): 32–43.
43. Steiner and Wooldredge, "Sex Differences in the Predictors of Prisoner Misconduct."
44. Grant Duwe and Susan McNeely, "The Effects of Prison Labor on Institutional Misconduct, Postprison Employment, and Recidivism," *Corrections: Policy, Practice and Research*, 2018.
45. Saylor and Gaes, "Training Inmates Through Industrial Work Participation and Vocational Apprenticeship Instruction."
46. Miriam Northcutt Bohmert and Grant Duwe, "Minnesota's Affordable Homes Program: Evaluating the Effects of a Prison Work Program on Recidivism, Employment, and Cost Avoidance," *Criminal Justice Policy Review* 23, no. 3 (2012): 327–51.

47. Duwe and McNeeley, "The Effects of Prison Labor on Institutional Misconduct, Postprison Employment, and Recidivism."
48. Harry Lamb and Victor Goertzel, "Ellsworth House: A Community Alternative to Jail," *American Journal of Psychiatry* 131, no. 1 (January 1974): 64–68.
49. Ann Witte, "Work Release in North Carolina—A Program That Works!," *Law and Contemporary Problems* 41 (Winter 1977): 230–51, <https://scholarship.law.duke.edu/lcp/vol41/iss1/7/>.
50. Grant Duwe, "An Outcome Evaluation of a Work Release Program: Estimating Its Effects on Recidivism, Employment, and Cost Avoidance," *Criminal Justice Policy Review* 26, no. 6 (2015): 531–54.
51. Saylor and Gaes, "Training Inmates Through Industrial Work Participation and Vocational Apprenticeship Instruction."
52. Kathleen Maguire, Timothy Flanagan, and Terence Thornberry, "Prison Labor and Recidivism," *Journal of Quantitative Criminology* 4, no. 1 (March 1988): 3–18.
53. Kerry Richmond, "The Impact of Federal Prison Industries Employment on the Recidivism Outcomes of Female Inmates," *Justice Quarterly* 31, no. 4 (2014): 719–45.
54. Northcutt Bohmert and Duwe, "Minnesota's Affordable Homes Program."
55. Duwe and McNeeley, "The Effects of Prison Labor on Institutional Misconduct, Postprison Employment, and Recidivism."
56. Elizabeth Drake, "Does Participation in Washington's Work Release Facilities Reduce Recidivism?," Washington State Institute for Public Policy, November 2007, http://www.wsipp.wa.gov/ReportFile/998/Wsipp_Does-Participation-in-Washingtons-Work-Release-Facilities-Reduce-Recidivism-Full-Report.pdf; Duwe, "An Outcome Evaluation of a Work Release Program"; Daniel LeClair and Susan Guarino-Ghezzi, "Does Incapacitation Guarantee Public Safety? Lessons from the Massachusetts Furlough and Prerelease Programs," *Justice Quarterly* 8, no. 1 (1991): 9–36; and Alvin Rudoff and T. C. Esselstyn, "Evaluating Work Furlough: A Follow-Up," *Federal Probation* 38 (1973): 48–53.
57. Drake, "Does Participation in Washington's Work Release Facilities Reduce Recidivism?"
58. Duwe, "An Outcome Evaluation of a Work Release Program."
59. Aos and Drake, "Prison, Police, and Programs."
60. Duwe, "An Outcome Evaluation of a Work Release Program."
61. Grant Duwe, "The Benefits of Keeping Idle Hands Busy: An Outcome Evaluation of a Prisoner Reentry Employment Program," *Crime & Delinquency* 61, no. 4 (2015): 559–86.
62. Duwe, "The Benefits of Keeping Idle Hands Busy."
63. Duwe, *What Works with Minnesota Prisoners*.
64. Duwe and Clark, "Nothing Will Work Unless You Did."
65. Ojmarh Mitchell, David Wilson, and Doris MacKenzie, "Does Incarceration-Based Drug Treatment Reduce Recidivism? A Meta-Analytic Synthesis of the Literature," *Journal of Experimental Criminology* 3, no. 4 (2007): 353–75.
66. William Bales and Daniel Mears, "Inmate Social Ties and the Transition to Society: Does Visitation Reduce Recidivism?," *Journal of Research in Crime & Delinquency* 45, no. 3 (2008): 287–321; and Grant Duwe and Valerie Clark, "Blessed Be the Social Tie That Binds: The Effects of Prison Visitation on Offender Recidivism," *Criminal Justice Policy Review* 24, no. 3 (2013): 271–96.
67. Christian Henrichson and Ruth Delaney, *The Price of Prisons: What Incarceration Costs Taxpayers*, Vera Institute of Justice, January 2012, <https://www.vera.org/publications/price-of-prisons-what-incarceration-costs-taxpayers>.
68. Duwe, *What Works with Minnesota Prisoners*.
69. Duwe and Clark, "Nothing Will Work Unless You Did."