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### **Employment and Vocation Programs in Prison**

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### **Abstract and Keywords**

Historically, work has played an important role in managing correctional populations and providing a means to reduce prisoner idleness. As correctional ideologies have shifted over time, the concept of working while incarcerated has taken on more of a rehabilitative approach. Several policies and correctional initiatives have been developed to integrate prison industry and employment services into correctional systems in an effort to address the poor employment histories and low job-related skills of offenders. Evaluations of these programs demonstrate that participation in prison industry and employment services can increase job prospects and lower the chances of recidivism. The effectiveness of prison-based employment programs vary, however, and is dependent upon the key components incorporated into their design. Despite the differences between programs, employment services offered in prison seem to be an effective approach to addressing employment deficits among offenders.

Keywords: prison, prison industry, prison-based employment programs, prison employment services, employment deficits among offenders

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There is a well-established link between employment status and criminal behavior (Sampson and Laub 1993; Andrews and Bonta 2010; Tripodi, Kim, and Bender 2010). Specifically, the empirical literature finds that employment is an important criminogenic need (i.e., dynamic risk factor) that relates to the risk to reoffend (Andrews and Bonta 2010). On average, offender populations generally lack adequate marketable job skills when compared to the general population (for reviews, see Wilson, Gallagher, and MacKenzie 2000; Andrews and Bonta 2010). However, when former prisoners are successful in gaining meaningful, legitimate employment, it significantly reduces their risk to reoffend (Sampson and Laub 1993; Uggen 2000). Programs aimed at reducing problems related to this risk factor have been suggested as a cost-effective method to increase employability and reduce recidivism upon release from prison (Aos, Miller, and Drake 2006; Drake, Aos, and Miller 2009; Sedgley, Scott, Williams, and Derrick 2010;

Bohmert and Duwe 2012). Given this context, there is a need to identify the effective characteristics of prison-based employment programs that seek to develop inmates' work-related skills as a form of rehabilitation. These programs can help alleviate some of the barriers related to reentry, reduce postrelease offending, increase the chances for a successful reintegration into communities, and make the public safer.

This chapter provides an overview of the interventions, strategies, and approaches that are most effective in targeting the employability of former prisoners upon release. In order to assess the effects of prison-based employment programs, this chapter is organized in the following manner: Section I discusses the historical context for integrating work into correctional systems. In order to assess the success of prison-based employment programs, the following sections of the chapter examine the relevant literature bases: the rationale for integrating prison-based employment programs within correctional systems (Section II), a review of the literature on the effectiveness of these programs on postrelease outcomes (Section III), and the characteristics of effective programming (Section IV). The main conclusions of this chapter include the following:

- Prison employment was initially utilized to provide institutional structure and reduce prisoner idleness but, over time, has adopted a rehabilitative approach in an attempt to reduce future criminality and enhance reintegration outcomes.
- These goals provide reason to implement prison-based employment programs that aim to reduce the barriers faced among former offenders when seeking employment and target criminogenic need areas to reduce offender's risk level.
- Effective employment and vocational programs offered in prison demonstrate short- and long-term effects on postrelease outcomes by increasing employment, reducing recidivism rates, and providing monetary benefits to taxpayers and crime victims.
- Characteristics of the effective programs include components such as incorporating multiple program components, community follow-up services, and teaching skills relevant to the current job market.

## I. Historical Context

There has been a long-standing emphasis in corrections on employment training, with productive labor being an important element of correctional institutions since their inception (Piehl 1998; Gaes, Flanagan, Motiuk, and Stewart 1999). Prison labor was introduced in American prisons during the latter part of the seventeenth century when Pennsylvania declared, "All prisons shall be work-houses" (Garvey 1998). The earliest

purpose of inmate labor was economic, where it would help reduce some of the costs associated with maintaining prisoners (Miller and Grieser 1986). However, prison labor has served several functions and purposes since the earlier prison system. The creators of the early American prisons believed that prison labor confronted the main cause of crime—idleness. By incorporating labor, the inmates could (a) follow a structured daily regimen, (b) learn new habits, and (c) ultimately reform themselves (Garvey 1998).

The idea that hard, productive labor can initiate the reformation process of inmates did not come to full fruition until the expansion of prisons in the early nineteenth century (Cullen and Travis 1984; Dwyer and McNally 1993; Garvey 1998). The significance of the expansion was profound as it utilized inmate labor as a cheap source to sell to private industries and then place the products on the open market for sale (Miller and Grieser 1986; Roberts 1996; Travis 2005). However, a widespread opposition to prison industries quickly developed due to the abuse of inmate labor, economic issues concerning competition between organized labor and competing manufacturers, and the critically high national unemployment rates during the Great Depression (Miller and Grieser 1986). As a result, Congress prohibited the federal government from purchasing prison-made goods and made it illegal for states to import these products in the early parts of the twentieth century (Miller and Grieser 1986; Sexton 1995; Roberts 1996). In conjunction with the laws passed by Congress, a reform movement advocated that prison programming should take more of a rehabilitative approach rather than use it for an economic objective (Miller and Grieser 1986). These early reformers were setting the stage for the use of reformatories and treatment programs that emphasized employment training and vocational programs. By the mid-twentieth century, the rehabilitative ideal was reinforced with the reemergence of prison industries and the development of employment/vocational training services (Roberts 1996; Solomon, Johnson, Travis, and McBride 2004).

### A. Prison Industry Programs

The restoration of prison industries (e.g., Affordable Homes Program [AHP], Post-Release Employment Project [PREP], and Prison Enterprises Network) was made possible in 1979 when Congress created the Prison Industry Enhancement Certification Program (PIECP). In an effort to alleviate restrictions previously imposed on state prison-made goods, the PIECP permits certified state and local corrections departments to sell inmate-made products through interstate commerce and to the federal government in amounts exceeding the limit typically placed on such trades (Bureau of Justice Assistance 2004). Specifically, the program was implemented to encourage state and local agencies to collaborate with private companies and generate products from inmate labor in a way that approximates private-sector work opportunities (Solomon et al. 2004). The program

not only offers inmates vocational training but provides a realistic working environment that can translate to specific marketable skills to enhance job opportunities upon release (Richmond 2014). The underlying rationale for implementing a prison industry program is that the structured work routine and associated wages may reduce prison misconduct while increasing inmates' chance for successful rehabilitation and meaningful employment opportunities upon release (Cullen and Travis 1984; Garvey 1998).

Contemporary prison industry programs encompass a broad range of employment related activities, which produce products and services for the government and private-sector consumers (Bouffard, MacKenzie, and Hickman 2000). Prison industries typically include activities that range from "traditional work," such as laundry, food services, and license plate manufacturing to more "innovative" programs including computer refurbishing, farming, and textiles (Lawrence, Mears, Dubin, and Travis 2002). Some states create prison industries that train offenders for a specific type of job or profession; however, this is a less common approach for these types of programs. For example, the Minnesota Department of Corrections manages the AHP. The AHP provides hands-on training to inmates in the community, specifically the construction trade (Bohmert and Duwe 2012). In contrast, other states employ prison industry programs that are more diversified. To illustrate, Lawrence and colleagues (2002) found that Indiana offers over 50 different types of industries for inmates across only 14 facilities. Regardless of the specificity of the industry program, it is expected that those individuals who have at least some exposure to a wide range of work activities will have more job prospects compared to those inmates without such program exposure (Lawrence et al. 2002).

The primary goals of prison industry programs are to generate revenues that help offset the costs of incarceration, compensate crime victims, and provide financial support to the families of those incarcerated while reducing idle time in prison and increasing job-related skills (Solomon et al. 2004; Bureau of Justice Assistance 2004). According to Maguire, Flanagan, and Thornberry (1988), Sexton (1995), and Lawrence et al. (2002), prison industries have been successful in lowering facility operating costs and reducing prisoner idleness. Maguire et al. (1988) and Sexton (1995) further note that such programming generates an income for correctional facilities through the sale of prison-made products and provides the necessary skills and training for later use by released offenders. Moreover, it is suggested that prison industry work can help inmates develop time management skills, learn self-discipline, and acquire proper work ethic (Maguire et al. 1988). Awareness of the benefits that prison industries provide has resulted in the establishment of several policies and practices aimed to prepare inmates for a successful reintegration upon release.

However, there are reasons to suspect that prison industry programs may not be effective in increasing the chance of employment opportunities upon release. Some scholars

caution that many of the specific trade or industry skills learned in prison are not applicable or may not appeal to the job market once released (Maguire et al. 1988; Solomon et al. 2004). For example, Solomon and colleagues (2004) note that among the 1.1 million state and federal inmates in 2000 eligible for work, nearly half were assigned to institutional maintenance jobs (e.g., laundry and janitorial labor). This implies that the “job-related skills” offenders learn while in prison may provide a limited foundation for obtaining a high-quality position postincarceration (Lawrence et al. 2002). Maguire et al. (1988) also raised concerns that prison industry programs often train inmates in jobs that have an excess of employees or require professional licenses that are difficult for former prisoners to obtain. Job prospects may be especially limited for released inmates given that helping offenders achieve certification of a specific trade or profession is not a highly emphasized component of prison industry programs (Bohmert and Duwe 2012). For these reasons, prison programs have shifted their focus to offering vocational training and services aimed to address the limitations of prison industry programs.

### **B. Vocational Training and Services**

Vocational training and employment service programs have a much shorter history than prison industry programs. These types of programs were established in the late 1960s and early 1970s, when rehabilitation was still at the forefront of the criminal justice system’s efforts (Pollock 2013). They are predicated on the assumption that individualized vocational instruction will provide prisoners with an opportunity to learn specific skills to increase job prospects once released back into society (Austin and Irwin 2001; LoBuglio 2001). Thus employment programs seek to address certain skill deficiencies (e.g., poor educational attainment and reduced employability) in order to help offenders successfully compete in the job market (Bouffard et al. 2000; Lawrence et al. 2002).

Given the goals of vocational training and employment service programs, they integrate several different approaches to distinguish themselves from prison industry programs. In particular, vocational training and services provide apprenticeship training, where the focus is on helping offenders earn a certificate for a specific profession such as carpentry, auto mechanics, or electronic servicing (Lawrence et al. 2002; Bohmert and Duwe 2012). Additionally, courses in employment services are often offered to teach inmates basic work knowledge (e.g., life skills, time management, and work ethics) and address educational needs (Bouffard et al. 2000; Wilson et al. 2000). Further, employment programs emphasize placement assistance and intensive job preparation (Bouffard et al. 2000). Several programs (Project Re-Integration for Offenders, Project Community, Restitution, and Apprenticeship-Focused Training, and Center for Employment Opportunities [CEO]) exist that assist offenders in setting up interviews and establishing connections with outside agencies to secure a job upon release. In addition to assistance

with job referrals, some employment programs offer workshops, preemployment classes, and onsite training to prepare offenders for a variety of professional careers (Finn 1998).

The establishment of vocational training and employment service programs shifted the focus to not only increase productive work while incarcerated but also to provide services aimed at enhancing specific job-related skills to help increase marketability upon release. However, some express concerns that vocational programs still attempt to train offenders in more general rather than specific fields (Lawrence et al. 2002). It is suggested that offenders will have greater job prospects and higher paying jobs if they can demonstrate mastery of a specific skill or market demand. In addition, though these programs share several similarities, the intended outcomes (e.g., reduced recidivism, job placement, and maintaining employment) may vary (Bouffard et al. 2000). Thus it is critically important to identify the types of work programs that are capable of reaching their intended outcomes to inform future policies and practices.

## **II. The Rationale for Prison-Based Employment Programs**

There are a multitude of reasons to justify the incorporation of work in prisons. First, research has consistently found an association between unemployment and crime (Wolfgang, Figlio, and Sellin 1972; Farrington 1986; Sampson and Laub 1993). Second, when we compare offenders to those who do not engage in crime, we can find several factors that distinguish the two. Employment, in particular, is recognized as one of the important risk factors that distinguish offenders from nonoffenders (Andrews and Bonta 2010). Third, the absence of work experience and jobs skills coupled with the barriers of finding employment upon release may contribute to former prisoners remaining unemployed and reverting to subsequent criminal behavior (Austin and Irwin 2001). Therefore, it is clear that any efforts made to enhance employment outcomes for offenders will need to provide services that address these barriers.

### **A. Employment as a Risk Factor for Recidivism**

There is a large body of research examining conditions attributable to recidivism, which consistently documents that employment status correlates with recidivism. Specifically, Gendreau, Little, and Goggin (1996) conducted a meta-analytic review examining the literature on recidivism for adults and found that criminal background, lack of education, and inadequate employment skills were among the strongest predictors for reoffending.

In addition, Simourd (1993) found that those who lack personal education and vocational achievement have a 28 percent higher chance of engaging in crime. Obtaining and maintaining employment is one factor thought to influence desistance from criminal behavior (Sampson and Laub 1993).

In addition to the findings on the relationship between employment status and recidivism, Andrews and colleagues (2010) identified a set of eight risk factors associated with an offender's risk to reoffend. Employment status is included as one of the central eight risk factors. Additionally, researchers classify employment status as a "dynamic" risk factor. Dynamic risk factors are those factors that relate to an offender's risk to reoffend but can change over time. Advocates of correctional rehabilitation argue that these crime-producing factors should be the target for treatment programs as they most strongly and consistently relate to future criminal involvement, and, when targeted for change, the chance of an offender recidivating significantly decreases (Andrews and Bonta 2010). The corrections literature categorizes dynamic risk factors into two types: (a) acute needs, which indicate that the need areas change relatively quickly, and (b) stable needs, meaning that it requires more time and effort to change the need areas (Andrews and Bonta 2010). Previous research suggests that employment is an acute need, but it is a multifaceted concept that relates to other risk factors (Latessa 2012). For instance, an individual's risk level can change quickly if one is unemployed one day and finds employment the next. However, other dynamic risk factors relate to an individual's employment success (e.g., attitudes toward work, poor problem-solving or coping skills, criminal attitudes/beliefs) and require additional time and effort to address. Thus, in order for employment programs to be effective, they will need to address acute dynamic needs as well as other related risk factors that can interfere with the ability to obtain and maintain employment.

Given this information, research has suggested that employment is not one of the "Big Four" or top-tier risk factors of criminal behavior (see Andrews and Bonta [2010] for more information). The corrections literature finds that other risk factors (i.e., peer associations, antisocial personality and cognitions) correlate more strongly with the criminal behavior of individuals compared to the second-tier or "moderate" risk factors (i.e., school/work, family/marital status, substance abuse, and leisure/recreation). For example, Bucklen and Zajac (2009) found that offender attitudes and expectations associated with employment strongly relate to success and failure and may be more critical than employment itself. This would suggest that employment programs targeting employment deficiencies should not be offered as a replacement for interventions that target top-tier risk factors but rather in conjunction with these services to address other risk factors that could hinder one's success in maintaining employment.

## **B. The Need for Employment Programs**

While it may be a requirement for a released offender to find employment (e.g., as a condition of parole/probation), obtaining and maintaining employment may be a difficult challenge for this population. Individuals with a criminal record are already at a disadvantage when searching for employment, yet the barriers become exacerbated the longer an individual remains incarcerated. While incarcerated, commitment to conventional norms may weaken, leaving few legitimate opportunities upon release (Hagan and Dinovitzer 1999; Western et al. 2001). Having a criminal record can also hinder subsequent job wages and stability (Sampson and Laub 1997; Bushway 1998; Western et al. 2001). Previous research suggests that offenders are more likely to obtain employment in secondary labor market positions (i.e., jobs that are highly unstable, have low expectations for promotional opportunities, and provide lower pay) when compared to the general labor force, both prior to incarceration and following release (Saylor and Gaes 1997).

Other barriers faced by former offenders trying to obtain and maintain employment include poor employment history (due to incarceration), erosion of past job-related skills, and transportation difficulties (Visher, Winterfield, and Coggeshall 2005). Moreover, employers are typically reluctant to hire individuals with a criminal record (Holzer, Raphael, and Stoll 2003). In conjunction with the identified barriers, the potential threat to public safety among former offenders who remain unemployed in the community give purpose to identifying effective programming that seeks to enhance employability and lower recidivism rates for this population.

Due to the challenges faced by many former prisoners, most experts agree that deficiencies in adequate job training and employment opportunities are a critical area of concern (Turner and Petersilia 1996). In addition to the presumed benefit of employment reducing an offender's risk for future offending, employment programs can reasonably be expected to provide offenders with several advantages. First, a good job allows for adaptation to a productive lifestyle, the development of prosocial relationships and a sense of self-efficacy, and the fostering of a sense of conformity to a conventional lifestyle (Visher et al. 2005; Latessa 2012). Second, participation in employment programs may also contribute to a reduction in prison misconduct, violence, and disturbances within institutions (Saylor and Gaes 1997; Wilson et al. 2000), perhaps because inmates are utilizing their time constructively and receiving reinforcement for their prosocial behaviors (Wilson et al. 2000). It has been found that employment structures daily patterns of behavior for ex-offenders and signifies a source of informal social control (Sampson and Laub 1997; Uggen 1999; Uggen and Staff 2001; Visher et al. 2005). Finally, working while incarcerated provides inmates with an opportunity to address poor



employment histories by enhancing job-related skills and learning good workplace habits (Solomon et al. 2004).

### **III. Current Knowledge of Employment Effects**

Criminological research has previously shown an inverse relationship between employment and crime (Sampson and Laub 1993; Laub and Sampson 2003). This would suggest that former offenders who obtain employment are less likely to recidivate. As a result, there are several different types of prison-based employment programs implemented that aim to provide employment assistance to help alleviate some of the challenges faced by this population when re-entering the community (Uggen and Staff 2001). Given this information, several researchers have examined the effectiveness of these types of programs and their ability to enhance employability, decrease recidivism rates among former prisoners, and act as a cost-effective method of transitioning former offenders back into society.

#### **A. Evaluations of Prison-Based Employment Programs**

Extant studies of prison-based employment programs have looked at two primary outcomes: employment and recidivism. Among the existing studies, however, most of the research examines recidivism as the primary outcome. Some evaluations take their analysis a step further by calculating the cost of such programming (Aos et al. 2006; Drake et al. 2009; Sedgley et al. 2010; Bohmert and Duwe 2012). In general, the literature supports the use of employment programs for prisoners. The majority of the research suggests vocational and industry programs increase offender employability, reduce postrelease criminal behavior, and are a cost-effective method of repaying crime victims and taxpayers. These are important themes given that these evaluations have examined different groups of offenders and different programs and have used different methodological approaches. However, it is important to note that many of the evaluations examine the effectiveness of vocational training and employment services whereas few have focused on prison industry programs. Additionally, this area of the literature largely generalizes to male inmate populations, as many evaluations have not included females in the samples due to insufficient numbers of females available for analysis. Despite these potential shortcomings, this section reviews the effects of prison-based employment programs on employment and recidivism outcomes and examines the cost-effectiveness of such programs.

### 1. Employment Outcomes

The purpose of examining employment outcomes is to determine whether employment services offered in prison can increase the chance of former offenders obtaining and maintaining employment upon release. Following a review of the literature, there is sufficient evidence to suggest that prison-based employment programs produce positive outcomes for participants (Saylor and Gaes 1997; Smith et al. 2006; Wilson et al. 2000; Bohmert and Duwe 2012). However, there is evidence to suggest that this effect diminishes over time (Saylor and Gaes 1997; Zweig et al. 2011). Despite this limitation, two conclusions can be drawn from the literature as they relate to employment outcomes. First, employment programs are capable of increasing the employability of offenders both in the short and long run. Second, such programs assist offenders with developing specific employment-related skills and may have a marginal impact on helping former inmates obtain higher quality positions.

The literature suggests that employment programs are effective for enhancing job readiness skills and employability among former offenders (Saylor and Gaes 1997; Wilson et al. 2000; Seiter and Kadela 2003; Smith et al. 2006; Bohmert and Duwe 2012). In a meta-analysis examining the effectiveness of educational, vocational training, and work programs, Wilson and colleagues (2000) found that program participants are employed at a higher rate than comparison groups. Among the eight studies that included employment as an outcome measure, the findings revealed that program participants were twice as likely to find postrelease employment. Similarly, Bohmert and Duwe (2012) found that program completers of the AHP—a program that trains offenders in the construction trade while incarcerated—had a 14.7 percent higher employment rate upon release than nonparticipants. Further, PREP was specifically designed to evaluate the effects of employment experience, vocational training, and apprenticeship on postrelease outcomes (Saylor and Gaes 1997). Analyzing data on more than 7,000 offenders from the Federal Bureau of Prisons, the findings revealed that program participants were 24.4 percent more likely to obtain full-time employment compared to nonparticipants.

Prison-based employment programs are also associated with helping offenders obtain employment more quickly and maintain employment for longer periods (Saylor & Gaes, 1997; Smith et al., 2006; Bohmert and Duwe 2012). In a national review of the PIECP, Smith et al. (2006) found that the participants were 15 percent more likely to obtain employment faster and nearly 10 percent more likely to maintain their employment for more than one year than the comparison group. Saylor and Gaes (1997) report a similar finding in regards to long-term effects on postrelease employment outcomes, where program participants were significantly more likely to be employed at the 12-month follow-up than those who did not participate in any prison industry, vocational training, or apprenticeship program (71.7 percent vs. 63.1 percent). Though this finding is

significant, it is important to note that the difference in employment rates between the two groups narrowed over time. A similar finding was produced by Zweig and colleagues (2011) evaluating the impact of the CEO program in New York State. Finally, Bohmert and Duwe (2012) found that those participants who completed the AHP program averaged 228.63 more hours worked than the comparison group.

The literature also provides some support for the notion that employment programs are effective with enhancing specific employment-related skills, and by extension, helping offenders obtain employment in a specific field (Bohmert and Duwe 2012). For example, Bohmert and Duwe (2012) found that training exclusively in the construction field (e.g., plumbing; electrical work; and highway, bridge, or street construction) increased the chances that program participants were placed in a construction-related job. Specifically, 32.1 percent of the AHP participants (including those who completed the program as well as those who did not complete the program) had a job in the construction field compared to only 16.9 percent of members in the comparison group. It is important to note that 39.7 percent of the program completers actually obtained employment in a construction-related field compared to 17.9 percent of the program terminators (those who participated in but did not complete the program).

The findings related to employment program effects on increasing the possibility of higher wages among participants are mixed. Smith et al.'s (2006) findings reveal that program participants had significantly higher wages than the comparison group. Specifically, individuals who participated in the PIECP program earned, on average, \$44,263 compared to the average \$27,136 earned by nonparticipants (Smith et al. 2006). Similarly, Bohmert and Duwe (2012) found that AHP program completers were significantly more likely to earn higher-paying jobs than those in the comparison group, where they earned an average of \$3,351.15 more than their comparison counterparts. In contrast, Saylor and Gaes (1997) failed to find any significant differences in wages earned between the PREP participants and comparison group members.

## 2. Recidivism Outcomes

The purpose of examining recidivism outcomes is to determine whether employment services offered in prisons are capable of reducing reoffending among former offenders. Of the programs evaluated, two main conclusions can be drawn as they relate to recidivism. First, employment programs reduce postrelease recidivism, both in the short and the long term. Second, the findings are mixed in terms of whether employment programs can reduce institutional misconduct, but few studies have examined this concept as an outcome.

The literature demonstrates that prison work programs are effective in reducing the recidivism rates of former prisoners. In a meta-analytic review, Wilson et al. (1999)

examined the effectiveness of corrections-based education, vocation, and work programs on reducing recidivism. The findings indicate that program participants were less likely to recidivate than the comparison groups. Aos et al. (2006) found a 9 percent reduction in recidivism among participants of the four prison-based vocational programs included in their meta-analysis. In addition, Aos and colleagues (2006) reported that the four correctional industry program evaluations reduced recidivism by 6 percent. Similarly, in their reviews of existing program evaluations, both MacKenzie (2000) and Seiter and Kadela (2003) concluded that vocational programs reduce recidivism. Last, Bohmert and Duwe (2012) found that AHP program completers had significantly lower recidivism rates than their counterparts. For example, the program completers had a reconviction rate that was 10.9 percent lower than the comparison group while the program terminations (those who participated in but did not complete the program) had a reconviction rate that was 10.1 percent higher than the comparison group (Bohmert and Duwe 2012).

The findings on recidivism outcomes also indicate that prison-based employment programs have long-term effects. Evaluations of the PIECP, in particular, show significant reductions in postrelease recidivism among participants (Smith et al. 2006; Hopper 2013). Using data from the Indiana and Tennessee Departments of Corrections, Hopper (2013) concluded that over one-year, two-year, and three-year postrelease periods, there were consistently significant reductions in the odds of recidivism for program participants. Similarly, Smith et al. (2006) found that PIECP participants were more likely to display lower recidivism rates and less likely to experience a subsequent arrest (59 percent vs. 53 percent), conviction (77.9 percent vs. 73.6 percent), and incarceration (93 percent vs. 89 percent) compared to their counterparts. Using a follow up period ranging from 8 to 12 years, Saylor and Gaes (1997) examined the recidivism rates of participants in vocational and apprenticeship training. The findings revealed that program participants had a 33 percent lower likelihood of reincarceration than individuals in the matched control group. Further, Sedgley et al. (2010) conducted a study that examined the recidivism rates of 4,515 male prisoners released in Ohio during the time between 1992 and 2002. They found that participation in education and employment programming is an important component to help reduce recidivism rates. The participants of the programs were able to stay out of prison at higher rates when compared to the nonparticipants (Sedgley et al. 2010). However, the effects diminished over time, so Sedgley and colleagues suggested that the programs had a marginal effect on recidivism rates.

The empirical literature has demonstrated a link between participation in prison-based programs in general and lower odds of rule violations during incarceration, but findings are mixed in terms of whether employment programs can reduce institutional misconduct. For example, Saylor and Gaes (1997) found that prison employment significantly reduced prison misconduct, where the study group members were 15

percent less likely than the comparison group to receive an incident report. In addition, members of the comparison group were more likely to be convicted of serious types of infractions and received harsher punishments for rule infractions. In contrast, a meta-analysis examining the impact of correctional programming on prison misconduct rates produced a null finding for educational and vocational programs (French and Gendreau 2006). On average, educational and vocational programs performed significantly worse than prison programs based on behavioral approaches. However, they found that educational and vocational programs had significant heterogeneity in effect sizes, which suggests that some of these programs could still play an important role in altering offenders' behaviors while incarcerated.

### **3. Cost-Effectiveness of Prison-Based Employment Programs**

Another way to assess the effectiveness of prison-based employment programs is to determine whether the benefits of the programs outweigh the costs. For example, if programs are successful in reaching their intended outcomes (e.g., recidivism), some of the state and government costs can be avoided. Few studies have reviewed the cost-effectiveness of prison-based employment programs, but the four that exist have yielded evidence to support the notion that these programs save a substantial amount of money in incarceration costs (Aos et al. 2006; Drake et al. 2009) and help to reduce costs to the state (Sedgley et al. 2010; Bohmert and Duwe 2012). This section reviews the literature that has examined the cost-effectiveness of prison-based employment programs.

There is evidence to suggest that the costs per participant for employment-related programs offered in prison vary depending on the type of program. For example, Aos et al. (2006) found that vocational education programs cost, on average, \$1,182 per participant while the marginal costs of prison industries per participant is \$417. Similarly, Drake and colleagues (2009) found that the average costs per participant for vocational education programs, prison industries, and work release were \$1,210, \$427, and \$615, respectively. Given that some of the costs to participate in these programs seem rather large, it is important to identify whether employment programs are capable of producing monetary benefits that would reduce costs paid by taxpayers and, by extension, the states.

Two studies (Aos et al. 2006; Drake et al. 2009) found substantial cost savings to taxpayers from postponing return to prison due to participation in employment services while in custody. For example, in their review of vocational education and prison industry programs in the state of Washington, Aos et al. (2006) found that a 9 percent reduction in recidivism for vocational education programs generates an estimated \$14,920 benefit to taxpayers. Similarly, Drake and colleagues' (2009) findings of a 6.4 percent reduction in reoffending for prison industry programs is associated with an estimated \$14,387 total costs avoided by taxpayers. They also found a substantially higher estimate of costs

avoided for taxpayers (\$21,932) with a similar reduction in recidivism (9.8 percent) for vocational education programs (Drake et al. 2009). These examples suggest that programs capable of achieving significant reductions in recidivism rates can reduce the amount of money taxpayers spend on the criminal justice system (Aos et al. 2006; Drake et al. 2009).

In addition to these findings, evaluations of prison-based employment programs suggest large monetary benefits to state and federal government agencies. To illustrate, Bohmert and Duwe (2012) examined the relative costs avoided to the state as a result of implementing the AHP program. Specifically, they assessed the costs saved by (a) housing AHP participants in local correctional facilities (rather than prisons), (b) using inmate labor in nonprofit agencies, (c) providing no-interest loans to nonprofit agencies, (d) producing tax contributions from post-release jobs, and (e) reducing recidivism. Their findings revealed that the program produced an estimated \$13.1 million in costs avoided to the state, which translates to \$58,491 reduced costs to the state per participant ( $n = 224$ ). The program produced a gain of \$61.86 for every dollar spent. Similarly, Sedgley et al. (2010) estimated the expected savings based on the recidivism rates of individuals who participated in prison industry, educational, and general institutional work programs. Using a statistical method to control for self-selection into a program, they found an estimated savings of \$3,619 in incarceration costs per individual due to a reduction in recidivism rates associated with a standard prison job. When participants participated in a prison industry program as well as a general institutional job, the results showed an additional cost savings of approximately \$2,763 per person.

### **B. Limitations of Employment Program Evaluations**

In recent decades, the research has demonstrated that prison programming can contribute to a wide range of positive outcomes. Unfortunately, tempering these encouraging findings is the fact that evaluations of prison-based employment programs to date have been limited in several ways. These caveats make it difficult to identify specific programs that are effective with their intended post-release outcomes. This section highlights the methodological limitations of extant research on the effectiveness of prison-based employment programs.

First, the most important issue to consider is that the methodological strategies for evaluating the effectiveness of prison-based employment programs have limited our ability to conclude definitively that these interventions are successful with improving outcomes among offenders (Finn 1998; Bouffard et al. 2000; Wilson et al. 2000). For example, a meta-analysis conducted by Bouffard et al. (2000) examining all of the available employment programs between the years of 1985 and 2000 revealed that only

25 evaluations (13 vocational education, 5 correctional industry, and 7 community employment) met the minimum standards of scientific rigor.

In addition, following a review of the literature, it appears that there is a direct correlation between the magnitude of the findings and quality of the study design. Specifically, studies that researchers rate as lower quality reported larger effects in comparison to studies of higher quality. Thus the effectiveness of employment programs is less conclusive when studies limit their research to high-quality studies. To illustrate, Visher et al. (2005) examined eight random assignment experimental design studies and found that job training and employment programs among ex-offenders produced modest to no effects on subsequent criminal activity. Visher and colleagues (2005) found that the mean effect size was 0.03, which was not a significant finding. This leads to the suggestion that such programs did not reduce arrest among the treatment participants by more than the amount expected by chance.

Second, a characteristic of weak research designs is that offenders often self-select into a treatment condition or volunteer for the study. This is especially true given that few prison programs are mandated (Lawrence et al. 2002) and, consequently, program participants are often more motivated. As a result, the potential for selection bias becomes a concern since there is a greater tendency for program participants to have certain characteristics that would keep them out of prison after release even in the absence of employment services (Uggen and Staff 2001). That is, the “positive” effects of programming may be a result of the differential characteristics between the program participants and the general population of inmates instead of the actual intervention (Gaes et al. 1999). Thus comparisons between the two populations should be approached with caution.

Few studies have been able to employ designs that control for biases produced by self-selection into employment programs. To overcome the problem of selection bias, some researchers have used a statistical matching procedure—propensity score matching (see Saylor and Gaes [1997] and Sedgley et al. [2010] for examples). This two-step approach first generates a propensity score of the study group and comparison group members based on personal attributes to determine the likelihood an offender would be selected for participation in a program (Saylor and Gaes 1997). The second step involves matching program participants to comparison subjects using the propensity score in addition to other variables (Saylor and Gaes 1997). This method increases similarities between the two groups on factors that would contribute to participation in a correctional program. It is important to note that this method does not fully rule out the possibility of bias as the propensity score is estimated based only on observable attributes and the covariates included in the analysis (Sedgley et al. 2010).

Finally, some of the programs combine several components, such as vocational education, prison industry work, and job searching, to target offenders' multiple need areas (Bouffard et al. 2000). Some researchers suggest that combining several approaches may increase program effectiveness (Andrews et al. 1990; Lipsey 1992; Gendreau 1993; Bushway and Reuter 1997). While targeting multiple need areas may produce more benefits than single component programs, however, they often present challenges for evaluations of program effectiveness. As a result, it is difficult to conclude with certainty that a single program element attributes to the effectiveness of an intervention (Lawrence et al. 2002).

## IV. Characteristics of Effective Programming

As previously described, a review of the literature demonstrates that prison-based employment programs are generally effective for increasing employment upon release from prison and for reducing recidivism. However, some programs are more successful than others in meeting these goals. Some evaluations have identified specific factors or characteristics that appear to relate to the most promising correctional program outcomes. It seems that programs are most successful if they teach skills relevant to the job market, include multiple program components, and integrate community follow-up services (Bushway and Reuter 1997; Wilson et al. 1999; Harrison and Schehr 2004).

Some evaluations suggest that vocational services and training may influence postrelease outcomes more positively than prison industry programs. For example, Saylor and Gaes (1997) found that inmates who participated in either vocational or apprenticeship training were 33 percent less likely to recidivate while inmates who worked in prison industries were 24 percent less likely to recidivate throughout the observation period. However, differential program type effects were not evident in all of the studies reviewed. One study in particular, Sedgley et al. (2010), found that regardless of the type of program in which the prisoner participated, the pattern of returning to prison was similar. Even so, their findings demonstrate that recidivism rates differ between those inmates who participated in prison industries, educational programs, or standard work assignments and those that chose not to participate in any programs. These findings provide further evidence that the influence of prison activities is an important component for reducing recidivism.

There are also several variables that may impact the relationship between offender employability and recidivism. For example, Uggen (2001) suggests that older subjects—defined as 27 years of age and older—benefit more from employment services than younger inmates. In addition, Lichtenberger and Weygandt (2011) found that employment



programs had greater success among moderate- and high-risk offenders relative to those in the low-risk group. Similarly, Zweig et al. (2011) found that the CEO was more effective in reducing postrelease recidivism among high-risk parolees compared to low-risk parolees. Although this impact of CEO on high-risk parolees did not emerge until after the second year of starting the program, there were few program impacts on recidivism for the low-risk and medium-risk parolees. This finding is consistent with the corrections literature, which argues that correctional treatment programs should target higher risk offenders to achieve the largest reductions in recidivism (Andrews and Bonta 2010). Higher risk offenders generally have more need areas to address (i.e., more room for change) and require intensive intervention to reduce their risk to reoffend. From a theoretical standpoint, exposing lower risk offenders to such treatment can adversely affect them as it potentially increases contact with higher risk offenders, disrupts protective factors, and may increase subsequent criminal involvement (Andrews and Bonta 2010).

Perhaps more important is the aftercare component of prison-based employment programs. The concept of transitioning prisoners from institutions to communities is not a new phenomenon. However, the scale of prisoner reentry is changing. For instance, the United States releases more than 630,000 prisoners annually (Carson and Golinelli 2013). The overwhelming number of prisoners released per year presents challenges to provide enough resources to prepare individuals for a successful reintegration. As a result, it is important to identify effective employment programs that not only provide services inside of the prison but also directly link into community employment upon release.

A problem is that the majority of the implemented programs in correctional facilities in the United States do not provide services beyond incarceration. In a study that examined the amount of “prison-to-community” work programs, Krienert (2005) found that most states had available programs to enhance job-related skills and training while incarcerated, but few of those programs (37.1 percent) allowed for a smooth transition into job placement upon release. Employment readiness classes and work readiness training were among some of the most limited programs with only 5.7 percent of states reporting available employment readiness classes and 2.9 percent of states offering work readiness training. Krienert (2005) emphasizes that there is not much support within our criminal justice system to successfully reintegrate offenders back into society.

Despite the fact that many institutions do not have work re-entry programs, empirical evaluations have supported the idea of implementing prison-to-community work programs. Specifically, several programs that help offenders transition back into the community have been successful in providing former prisoners immediate employment opportunities, enhancing job-related skills, and increasing work experience for more permanent positions. This literature also highlights the importance of aftercare in the

community in meeting these goals. For example, Safer Foundation is a nonprofit organization in Chicago that prepares offenders for completing job applications and teaches them appropriate job interview skills. In 1996, the program helped place 1,102 offenders in jobs in which 59 percent of the participants remained at their first position at the 30-day follow-up (Finn 1998). Similarly, Project Re-Integration for Offenders was designed to provide life skills classes, individual job readiness counseling, and help prepare offenders for job placement upon release (Finn 1998). In a 1992 evaluation of the project, 69 percent of the program participants obtained employment within one year compared to 36 percent of nonparticipants.

In addition to these findings, research has supported the idea that the length of participation in employment programs decreases the likelihood of former offender's recidivating. In their evaluation of the Preventing Parolee Crime Program (PPCP), Zhang and colleagues (2006) found that participants had an overall 8 percent lower recidivism rate than nonparticipants. Additionally, nonparticipants were 2.46 times more likely to be re-incarcerated in comparison to the PPCP participants. The likelihood of parolees recidivating decreased the longer they remained in the program. To illustrate, early dropouts (i.e., participants who had minimum participation in the program) represented the group that had the highest return to prison, followed by those who partially achieved the treatment goal (i.e., participants who received services but did not complete the treatment goal). Those participants who achieved the treatment goal were the least likely to be reincarcerated.

Collectively, the literature highlights the benefits of incorporating work programs into prison systems. The findings seem to suggest that employment programs offer prisoners opportunities to enhance job-related skills, learn how to manage employment, and sustain long-term employment. Relatedly, programs that help offenders successfully transition back into society by finding legitimate employment upon release have greater success in terms of less employment turnover and lower odds of recidivism. Based on the research, programs that integrate multiple components and target other dynamic needs related to an offender's ability to obtain and maintain employment appear to provide the most effective types of intervention.

## V. Conclusion

The purpose of this chapter was to examine the effectiveness of prison-based employment programs in increasing employability and reducing recidivism among former prisoners. Based on the literature, it is clear that the notion of incorporating work in prisons is not a new phenomenon. Hard labor in prison was predicated on the assumption that

individualized vocational instruction would provide prisoners with the opportunity to change for the better and to be reformed while incarcerated (Austin and Irwin 2001; LoBuglio 2001). This justification for work programs remains a fundamental component of prison operations today. Specifically, there are two main types of employment programs available to prisoners today: (a) prison industry programs and (b) vocational training and services.

The rationale for providing employment programs to prisoners is to address their lack of sufficient job skills and related behaviors that interfere with job success. It is clear that prisoners face insurmountable barriers to obtaining and maintaining employment, and when not provided an opportunity to enhance job-related skills in prison, those individuals may revert to criminal behaviors upon release. One method of reducing the problems faced by former prisoners upon release is to direct services to the most appropriate offenders using effective strategies that will enhance employability. However, it should be recognized that employment is considered a second-tier risk factor (Andrews and Bonta 2010). This suggests that employment programs should not be offered in lieu of interventions for the top-tier risk factors (i.e., criminal attitudes/values/beliefs, antisocial peers, antisocial personality traits) but rather in conjunction with these services.

Based on the current evaluations of prison-based employment programs, it seems that they are an effective method of increasing employability and reducing recidivism among prisoners. The results indicate that employment programs can enhance specific job-related skills, increase the chances of employability, reduce recidivism, and demonstrate short- and long-term effects on postrelease employment and recidivism outcomes. Furthermore, such programming proves to be a cost-effective method by saving taxpayers' money and keeping the public safe. However, it should be noted that some programs are more successful in meeting these goals. In particular, those programs that teach prisoners specific job-related skills (e.g., apprenticeship, vocational services), incorporate community follow-up components, and integrate multiple components may be better suited for achieving the implementation goals of such programming.

Given the conclusions drawn from this evaluation, the following recommendations are offered. First, employment programs should be incorporated into the available services for offenders both inside and outside of the prison system. Second, such programming should include intensive follow-up services to monitor offender job placement and address any issues that may interfere with a successful reintegration. Third, several key components of employment programs have been identified that will lead to greater reductions in recidivism: (a) institutional job readiness training, (b) job referral assistance, and (c) transition funds to assist with expenses during job search. Finally,

employment programs should combine skill acquisition with activities designed to target offender's attitudes about work.

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