

Work as a Turning Point for Criminal Offenders

Christopher Uggen and Jeremy Staff

This article considers whether employment is a “turning point” in the lives of criminal offenders. We present a brief overview of research on the relationship between work and crime. Our review suggests that work programs appear to be more effective for adult offenders than for adolescents and young adults. The quality of employment also appears to be important for reducing recidivism, although it is difficult to make definitive causal inferences based on observational evidence from existing studies. Finally, we find that work-based programs can reduce arrest rates for ex-addicts, but appear to be less effective in reducing future substance use. We conclude with several unanswered questions and directions for future research.

Key words: *age, desistance, employment, evaluation, recidivism, turning point*

Work as a Turning Point for Criminal Offenders

A confluence of related trends has renewed interest in the role of employment programs as a potential turning point in the lives of criminal offenders. First, the U.S. prison population continues to rise (U.S. Department of Justice, 2001) and the number of people released from state and federal prisons reached an all-time high of 712,713 at the end of 1999 (U.S. Department of Justice, 2000b). Moreover, recidivism rates appear to have risen in recent years, with a 54 percent growth in parole violations from 1990 to 1998 (Beck, 2000). Finally, employers facing a tight labor market in the robust economy of the 1990s have had greater incentive to dip into the ex-offender labor pool because low unemployment rates have led to new prison job fairs and corporate recruitment of offenders (Buck, 2000).

Although a variety of policy initiatives have been undertaken to prevent or reduce crime and recidivism (for a comprehensive review, see Sherman et al., 1998), employment remains one of the most important vehicles for hastening offender reintegration and desistance from crime (Bushway & Reuter, 1997).

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We take stock of the evidence regarding employment and training programs for both ex-offenders and young at-risk populations, emphasizing experimental evidence or rigorous evaluations of program effectiveness. We first examine how employment *per se* affects criminal behavior at different stages of the life course. Next, we consider how the quality of employment affects initial offending and recidivism. Finally, we evaluate the impact of work programs for drug offenders, considering recidivism to both substance use and other forms of criminal behavior. In each case, the kernel notion we wish to explore is whether entry into employment can be a “turning point” (Elder, 1985) in the lives of criminal offenders.

Linking Work and Crime: Theoretical Rationale, Needs Assessment, and the Selection Problem

Theories linking work and crime

Almost all of the classic criminological theories have hypothesized a negative relationship between some aspect of employment and crime or recidivism. For example, Robert Merton’s anomie theory suggests that crime results in part from the inability to obtain the type of employment that leads to cultural and material success (1938; Cloward & Ohlin, 1960). Social control theories also emphasize employment, positing that adult criminal behavior results from insufficient job stability and commitment (Kornhauser, 1978; Sampson & Laub, 1993). Economic theories of choice similarly posit a negative relationship between employment and crime, emphasizing the relative payoffs of conventional and illegal endeavors (Becker, 1968; Ehrlich 1973). Social learning and differential association theories, in contrast, stress the values, attitudes, and behaviors learned in interaction with others at work (Sutherland & Cressey, 1978). Finally, labeling and secondary deviance perspectives suggest that the stigma of a felony conviction restricts future access to meaningful employment and exacerbates subsequent criminality (Becker, 1963; Lemert, 1951). Although each of these theories emphasizes a different mechanism linking work and crime, they all suggest that the presence or conditions of employment may affect criminal behavior.

A current debate in life course criminology is whether employment is a key factor in the reduction

of crime over the lifespan, or simply a common correlate of the well-established decline in crime with age (Hirschi & Gottfredson, 1983). Those in the first camp argue that the relationship between work and crime is age-invariant and that employment does not explain the reduction in crime with age (Gottfredson & Hirschi, 1990). According to this perspective, crime declines with age regardless of ties to more conventional institutions in adulthood, such as marriage and the workplace. By this logic, employment programs for adult offenders are likely to have little effect on recidivism. Instead, criminal justice resources must be channeled to at-risk youth, for limiting “impulsiveness” and “low self-control” at a young age will prevent future offending.

Researchers and theorists in the second camp, in contrast, argue that the relationship between work and crime is variable over the life course. According to this view, the mechanisms that reduce criminal behavior in later adulthood include the quality or strength of attachment to work, to the spouse or family, or even to institutions such as the military (Greenberg, 1985; Sampson & Laub, 1990, 1993, 1996). As these attachments are formed, they can act as turning points that redirect trajectories of behavior throughout the life course. By this logic, criminal justice policy should be sensitive to these age-graded effects: older offenders are more likely to benefit from work programs whereas younger offenders are less likely to be attached to the labor market and are therefore less likely to benefit from work programs.

The need for work programs

Although most theories suggest that at least some ex-offenders may benefit from employment, their job prospects are limited by employers’ preferences, low levels of education and training, and fragmented personal networks or social capital. Empirical research has confirmed the stigmatizing effects of a criminal record (Hagan, 1993; Sullivan, 1989). For example, surveys of employers reveal a great reluctance to hire felony offenders (Holzer, 2000). Second, ex-offenders generally reenter the labor market with low education and limited work experience. Data from the 1997 National Survey of State Prison Inmates indicate that the average offender had only 10.7 years of education and that only 56 percent of inmates were employed full-time at the time of their most recent arrest (U.S. Department of Justice, 2000c).

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In response to such barriers, work programs have long been implemented by correctional and social service agencies. They provide employment assistance to help ease the transition back into society, and, it is hoped, to reduce the probability of recidivism. Although some programs have focused on vocational training, others have emphasized job placement, subsidized employment, or transitional financial assistance. The programs promised to overcome barriers to employment resulting from low levels of human capital and employer reluctance to hire ex-offenders. To the extent that such barriers could be overcome, the theories suggested, recidivism rates would diminish among employed offenders. To provide a rigorous test of their effectiveness, several programs were evaluated by experimental methods that randomly assigned offenders to treatment and control conditions. As we discuss later, a true experimental design helps isolate the effect of a program or treatment from the preexisting characteristics of people volunteering to participate in such programs.

The problem of selection bias in evaluating work programs to reduce crime

The relationship between work and crime (and the ongoing debate in the literature) has been difficult to determine with certainty. In most research settings, social scientists or correctional administrators cannot randomly assign life course transitions, such as marriage or employment, to gauge their effects on criminal behavior. Therefore, when these transitions occur it is virtually impossible to tell whether they are causes or correlates of changes in offending. Those in the age-invariance camp suggest that the apparent effects of work are really the result of preexisting "person effects" that drive people to select into dif-

ferent work statuses (Gottfredson & Hirschi, 1990). For example, the best recidivism risks may be most likely to self-select into higher quality jobs, but they would be less likely than other people to recidivate even in the absence of employment. More generally, characteristics such as substance use, intelligence, impulsiveness, and ambition may affect both the decision to work and the likelihood of criminal desistance, suggesting that work is a spurious correlate rather than a cause of changes in offending (Gottfredson & Hirschi, 1990).

The most definitive evaluations of employment programs occurred in the 1970s when several investigations used random assignment to work and nonwork conditions to address such concerns about self-selection. More recent research has used statistical correction techniques such as propensity scores (Saylor & Gaes, 1997) or Heckman-style hazards (1976, 1979) in attempting to adjust nonexperimental results for potential sample selection bias. We first review the results of programs that randomly assigned prisoners to work programs. Next, we examine some programs that have used statistical techniques to address the self-selection problem in estimating the effect of work on crime. Table 1 highlights the major employment and training initiatives for ex-offenders in the past 30 years using randomized assignment or strong statistical correction techniques to account for self-selection.

Early Evaluations of Work Programs

If ex-offenders are provided with jobs, are they likely to stop committing crime?

The research on prison-to-work programs in the 1970s has yielded inconsistent results: some programs find no effects on recidivism but others find small treatment effects for certain groups of offenders. For example, Soothill's (1974) analysis of England's APEX program, which focused on counseling and employment placement for ex-offenders, suggested little difference between the control and experimental groups in rates of recidivism. Similar research on the Michigan Comprehensive Offender Manpower Program, the job placement components of the Transitional Aid Research Project and the Living Insurance for Ex-Offenders, found that job placement had little effect on rates of recidivism (Berk, Lenihan, & Rossi, 1980; Borus, Hardin, & Patterson,

Table 1
SUMMARY OF SELECTED EMPLOYMENT AND TRAINING INITIATIVES FOR CRIMINAL OFFENDERS (1970–2000)

Program	Services Provided	Target Group	Design	Key Effects	Evaluations
National Supported Work Demonstration	Subsidized employment	Ex-offenders; ex-addicts; youth dropouts; AFDC recipients	Randomized assignment	Small overall effect on crime for offenders and youth. Reduced crime but not drug use in ex-addicts sample. Reduced crime for older offenders.	Piliavin & Gartner, 1981; Uggen, 2000; Uggen & Thompson, 2001
Transitional Aid Research Project and Living Insurance for Ex-Offenders	Job training and postrelease financial assistance	Ex-offenders; property offenders	Randomized assignment	No overall effect on recidivism. Financial assistance provided disincentive to work.	Berk et al., 1980; Rossi et al., 1980
Job Corps	Residential job training	Youth dropouts	Randomized assignment and matched comparison	Reduced arrest and conviction and higher long-term earnings for program completers.	Mallar et al., 1982; Cave et al., 1993; Schochet et al., 2000
Specialized Training and Employment Project	Job training and transitional assistance	Ex-offenders	Randomized assignment	No overall effect on recidivism.	Van Stelle et al., 1995
Post Release Employment Program	Job training	Ex-offenders; federal inmates	Nonrandom assignment with statistical correction	Program participants less likely to recidivate.	Saylor & Gaes, 1997

1976; Rossi, Berk, & Lenihen, 1980), although it may have improved mental health outcomes among released offenders (Liker, 1982).

The National Supported Work Demonstration Project (Piliavin & Gartner, 1981) randomly assigned ex-offenders, ex-addicts, and youth dropouts to employment and control groups, ensuring that measured job effects could not be attributed to preexisting individual characteristics. Recently released offenders, drug addicts, and high school dropouts were referred by criminal justice, social service, and job training agencies. The age and sex distribution of the ex-offender sample was similar to the U.S. prison population in several respects: the average age was 25, 94 percent of the participants were male, African-Americans and urban residents were overrepresented, and the sample averaged about 9 prior arrests at the beginning of the program.

After the program staff tested eligibility, the inmates were randomly assigned to treatment and control groups. Those assigned to treatment were offered supported jobs at minimum wage, primarily in the construction, service, and manufacturing industries; controls were not offered jobs. The jobs were scheduled to last from 12 to 18 months, but both the treatment and control group were followed for up to 3 years. By the end of the follow-up period, less than half of those in each group had yet to be arrested for new crimes. With respect to crime outcomes, the program seemed to work better for ex-addicts than for ex-offenders and youth dropouts. Although addicts in the treatment group were less likely to be rearrested than those in the control group, there were few significant differences among the youth dropouts or ex-offenders in recidivism or length of employment (Piliavin & Gartner, 1981).

More recent work programs that used either random assignment or a strong matched comparison design, such as the Specialized Training and Employment Project, again failed to find that transitional assistance and job training actually curtailed future law violation. An evaluation of the program found no significant difference between the experimental and control group in rates of recidivism after one year (Van Stelle, Lidbury, & Moberg, 1995). Likewise, an evaluation of a Job Training Partnership Act programming in Georgia compared ex-offenders with a control group of nonoffenders enrolled in the program. Finn and Willoughby (1996) reported that con-

viction status did not affect employment status, a surprising finding given employer reluctance to hire ex-offenders (Holzer, 2000). A lack of training and experience appeared to be the primary barriers to job entry, not whether the participant was an ex-offender.

Despite these null findings, research on correctional effectiveness continues to suggest that work may play some role in reducing recidivism. For example, Sherman and Smith (1992) reported that arrest for domestic assault had a significantly stronger deterrent effect among employed men than among unemployed men. Similarly, an observational study of Minnesota sex offenders on probation found that sex offender treatment is more effective for probationers with a steady employment history than for probationers lacking a steady work history (Kruttschnitt, Uggen, & Shelton, 2000).

Careful evaluations of nonexperimental work programs have also shown reduced rates of recidivism for participating ex-offenders. Saylor and Gaes (1997) examined the Post Release Employment Program, a vocational apprenticeship program for federal inmates. The experimental group was composed of inmates who had worked in a prison industry (57 percent), worked in a prison industry and completed vocational training (19 percent), or received vocational and apprenticeship training (24 percent). Even though inmates self-selected into the program, Saylor and Gaes (1997) used a sophisticated propensity score methodology to partially address the selection process and reduce bias in estimates of program effects.

Twelve months after release, offenders who had participated in the program had higher rates of postrelease employment than a comparison group (Saylor & Gaes, 1997). Long-term analysis of recidivism suggests that *male* program participants in prison industries were 24 percent less likely to recidivate and that those in either vocational training or apprenticeships were 33 percent less likely to recidivate than the control group. Among the smaller group of *females*, however, no significant differences were found between the work treatment and comparison groups.

In sum, the experimental studies of the 1970s generally found that employment and training programs for ex-offenders were ineffective in reducing rates of recidivism, although certain groups of offenders

seem to benefit from certain programs, such as ex-addicts in the Supported Work evaluation. Some evaluations of matched comparison group studies with statistical selectivity corrections (Saylor & Gaes, 1997) found that prison training programs reduced recidivism, though other experimental research found few long-term effects for ex-offenders (Van Stelle et al., 1995).

Age, Employment, and Crime

Are jobs programs more effective for older offenders than for younger offenders?

Despite the weak overall effects of employment and training programs for offenders, many evaluations find significant effects among a subgroup of participants. Life course theories of crime suggest

that the relationship between work and crime varies over the life course. Specifically, paid employment is likely to have a weak or positive effect in adolescence because it represents a premature or precocious transition to adult roles (Bachman & Schulenberg, 1993). Among adults, however, paid employment is likely to reduce crime by reducing economic need, increasing informal social controls, and facilitating development of a conforming rather than a deviant self-concept.

Uggen (2000) found an age-graded effect of work on recidivism in his analysis of the National Supported Work Demonstration Project discussed earlier.

Figure 1 displays the time until first arrest for offenders ages 26 and younger in the Supported Work data. The treatment group, or those ex-offenders assigned to supported work jobs, was not significantly

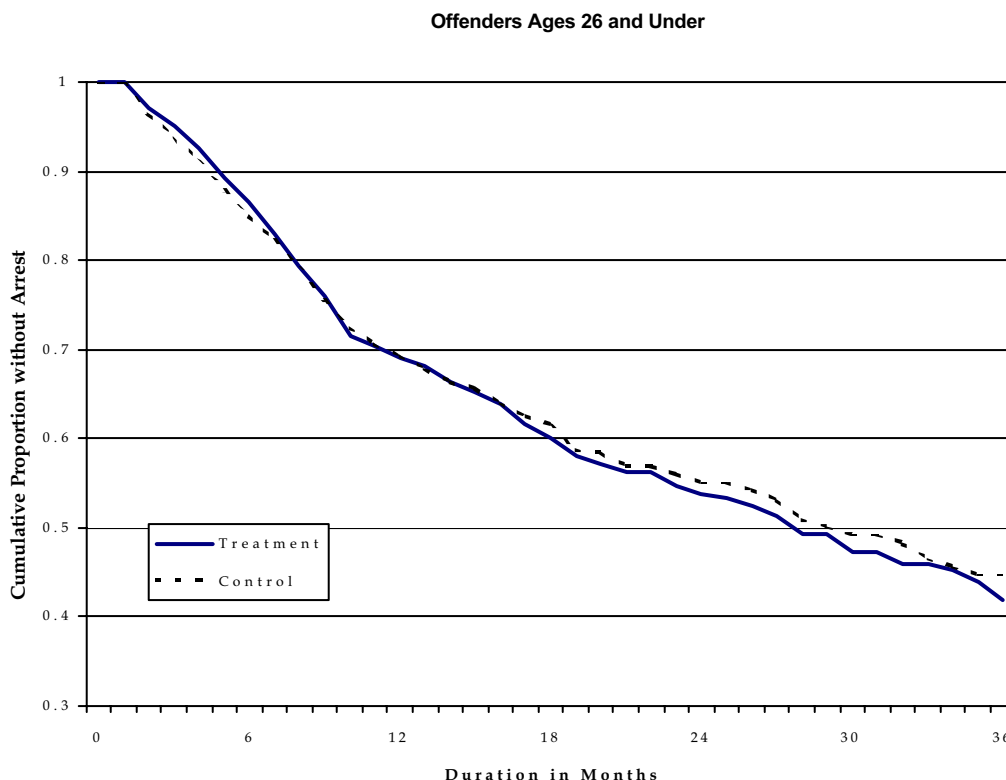


Figure 1. Time to arrest for supported work offenders ages 26 and younger.^{a,b}

^aN = 2,125

^b $\chi^2 = .2 (1)$

Source: Uggen, C. (2000). Work as a turning point in the life course of criminals: A duration model of age, employment, and recidivism. *American Sociological Review*, 65, 529–546.

different than the control group in time until first arrest. One year after random assignment, the control and experimental groups were nearly identical in the cumulative proportion that had avoided arrest with more than 30 percent of both groups reoffending in the first year. The long-term effect of work programs for young offenders was also nonsignificant: by the end of the follow-up period, more than 50 percent of the control and experiment group had recidivated.

Among older offenders, in contrast, the Supported Work program was much more effective in reducing rearrest rates. Figure 2 displays the time until first arrest for offenders ages 27 and older in the Supported Work sample. Overall, those assigned jobs survived (avoided arrest) longer than the control group not assigned jobs. One year after release from

prison, 67 percent of the control group had yet to be arrested, while 77 percent of the experimental group had not been arrested. The long-term effects are equally promising: by the end of the follow-up period, 58 percent of the experimental group and 46 percent of the control group had yet to be arrested. Results from this analysis suggest that work programs were much more effective for older than for younger offenders in reducing recidivism.

Although the evaluations of subsidized employment programs are less promising for youth, long-term residential job training and educational programs may help young offenders desist from crime. An evaluation of the Job Corps program shows that youth may be especially responsive to residential employment and training programs. Job Corps aims to provide disadvantaged youth (80 percent of the

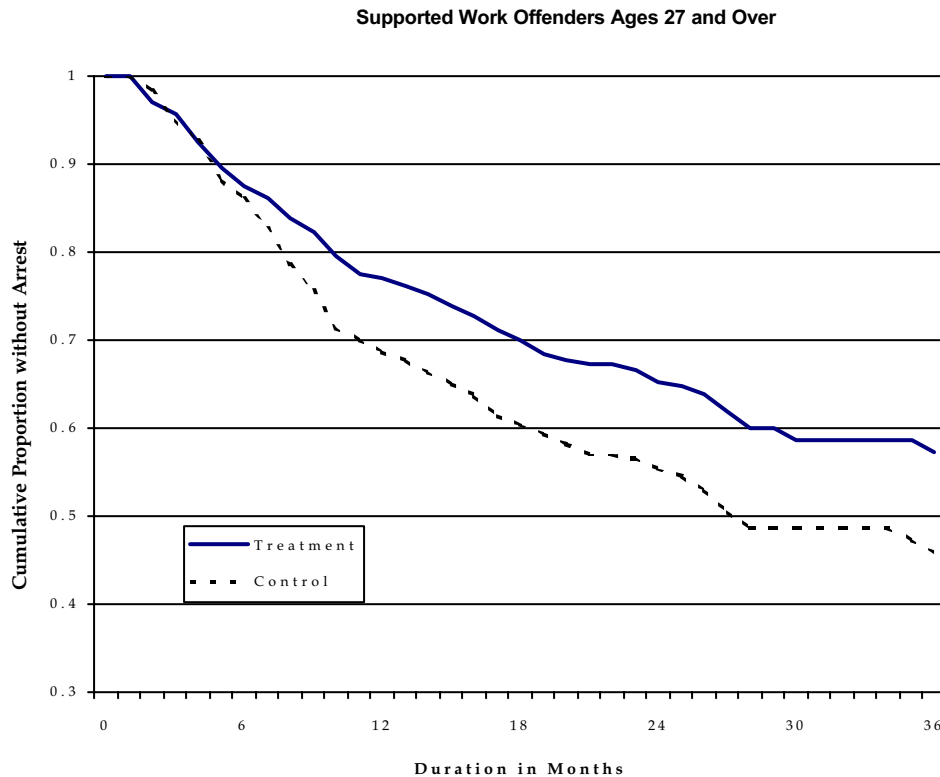


Figure 2. Time to arrest for supported work offenders ages 27 and older.^{a,b}

^aN = 980

^b $\chi^2 = 10.7 (1)$

Source: Uggen, C. (2000). Work as a turning point in the life course of criminals: A duration model of age, employment, and recidivism. *American Sociological Review*, 65, 529–546.

16–21 year old sample did not have a high school diploma) with education, vocational training, and health care services. In early nonexperimental evaluations, Job Corps participants were more likely to obtain a graduate equivalency diploma (GED) or high school diploma, have higher earnings, and lower rates of arrest for serious crimes (Mallar, Kerachsky, Thornton, & Long, 1982) than a comparison group.

More recent evaluations of the Job Corps program (Schochet, Burghardt, & Glazerman, 2000) have found similar results when randomly assigning participants to the program. Although fewer than half of those assigned to the program successfully completed it, those who completed the program were significantly more likely to obtain a GED or high school diploma, report higher earnings, and have lower arrest rates than the control group. The effectiveness of such long-term vocational and educational training among youth contrasted with the lack of effects of short-term nonresidential vocational placement and training (see, for example, Cave, Doolittle, Box, & Toussaint, 1993) suggests that adolescents and young adults may benefit from more intensive and lengthy intervention.

Nonexperimental research has also suggested that volunteer work may reduce rates of arrest for adolescents and young adults in the general population. In an analysis of a longitudinal panel of 1,000 high school students, Uggen and Janikula (1999) report that adolescents who perform volunteer work in high school were less likely than nonvolunteers to be arrested in young adulthood, net of prior deviance and other factors related to volunteer service and crime.

In sum, the research suggests that adults and young offenders respond differently to work programs: the interventions generally report small beneficial treatment effects for older ex-offenders, but short-term work programs appear to have little effect

on young law violators. Nevertheless, both experimental and nonexperimental evidence suggests that young offenders can benefit from a well-designed program emphasizing both vocational and educational development.

The mixed results of these work programs for both older and younger offenders have led some criminologists to argue that “high-quality” jobs (Allan & Steffensmeier, 1989, p.107) or “satisfying employment” (Shover, 1996, p. 129) are needed to reduce rates of recidivism. We next review the research literature on the relationship between job quality and crime.

Work Quality and Crime

Are ex-offenders who get “good jobs” more likely to desist from crime than those who find more marginal employment?

As economists have long understood, the basic problem in testing the effect of job quality on crime is the difficulty of disentangling job effects from the characteristics of people self-selecting into jobs. For example, low-risk parolees may be most likely to get the “good jobs” associated with parole success. To overcome this methodological difficulty, researchers can either randomly assign people to jobs (as in the Supported Work experiments) or they can use covariance adjustment or sample selectivity corrections to control for the individual propensities that affect both work and crime. Although an experimental design is almost always preferable to a nonexperimental design, the nonexperimental evidence on job quality and crime is suggestive.

Using a sample selectivity correction with the Supported Work data, Uggen (1999) found a small but consistent negative relationship between a satisfaction-based job quality measure and recidivism, net of pay, tenure, and other variables related to both job quality and crime. Figure 3 shows the bivariate relation. In the multivariate models, a shift from food service work (with a job quality score of .57) to skilled craft work (with a job quality score of 1.08) decreases the probability of criminal behavior by approximately 11 percent when other independent variables are held constant at their means. A shift from food service work to a less satisfying job as a machine operator in nondurable goods manufacturing, in contrast, increases the probability of criminal behav-

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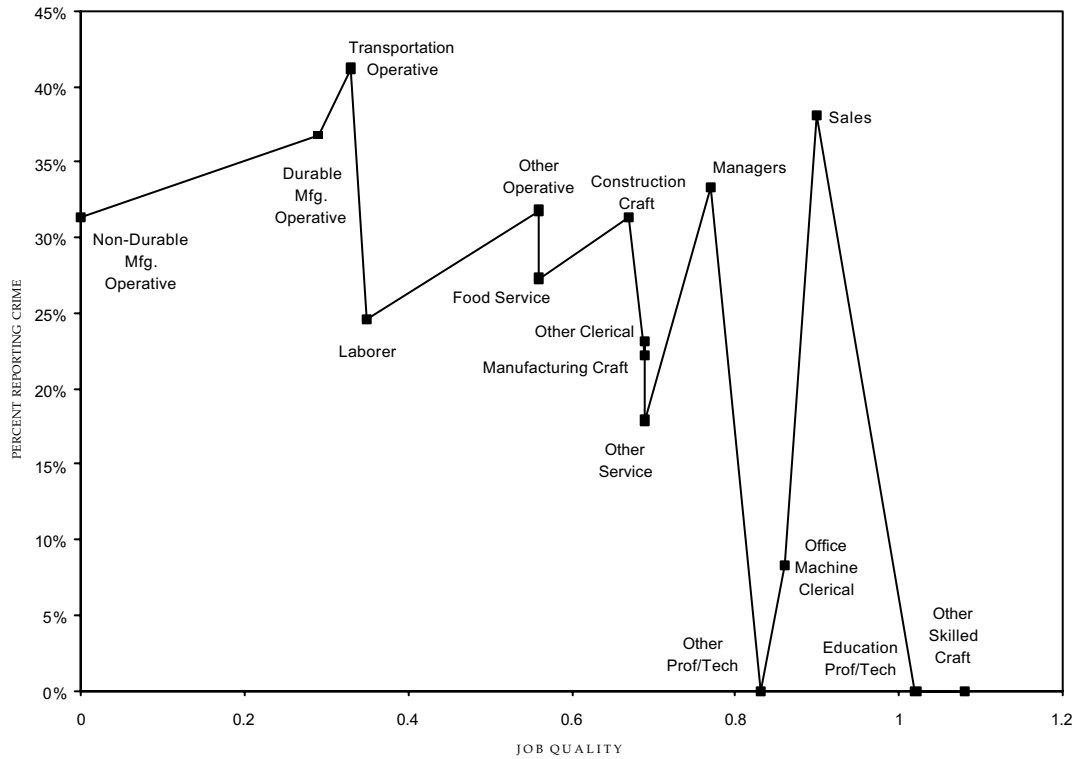


Figure 3. Job quality and crime among supported work offenders.^a

^aN = 488

Source: Uggen, C. (1999). Ex-offenders and the conformist alternative: A job quality model of work and crime. *Social Problems*, 46, 127–151.

ior by approximately 14 percent when all other independent variables are set to their mean values.

Other nonexperimental research has suggested that only stable, high-quality work could serve as a turning point for criminal offenders. In their analysis of longitudinal data from the 1950s, Sampson and Laub (1993) found that job instability and weak marital attachment were related to later criminality for both a delinquent and a control group. Even the most delinquent adolescents were likely to desist from crime when they become strongly attached to their spouse and experienced stable employment in adulthood. Other research suggests that the quality of employment is also important for reducing rates of deviance in the general population. For example, using a contemporary sample of young adults, Huiras, Uggen, and McMorris (2000) found that workers who report that they have entered into a “career job” com-

mit less workplace deviance than those who remain in “survival jobs” net of their prior levels of workplace deviance.

The effects of work quality on adolescent crime and deviance have received much less attention, although the relationship between adolescent work hours and delinquency is firmly established in the literature. Adolescents who work more than 20 hours per week tend to exhibit more problem behaviors, such as delinquency and drug use than those who work fewer hours (Agnew, 1986; Greenberger & Steinberg, 1986; Heimer, 1995; Wright, Cullen, & Williams, 1997). This effect is not necessarily a selection artifact arising from preexisting propensities of young workers, because some longitudinal evidence shows a strong effect of work hours on delinquency and substance use (Bachman and Schulenberg, 1993; McMorris & Uggen, 2000; Mihalic & Elliot, 1997;

Mortimer, Finch, Ryu, Shanahan, & Call, 1996; Steinberg & Dornbusch, 1991; Steinberg, Fegley, & Dornbusch, 1993). Few researchers have explored whether work quality affects adolescent delinquency in the same way as it affects adult crime, mainly because adolescent work quality is uniformly low, consisting primarily of lower level retail and service-sector jobs (Manning, 1990; Osterman, 1980). Although the range of industries or occupations may be limited among adolescents, the perceived quality of the employment may vary substantially.

Our own preliminary research suggests that adolescents do not respond to work quality in the same way as adults. In fact, many dimensions of work that signal a high quality job for adults, such as high earnings, status, and autonomy, appear to increase adolescent misbehavior. For example, Staff and Uggen (2001) found that adolescents with more autonomous working conditions had higher rates of school misconduct controlling for prior deviance and the total hours of work per week. Figure 4 displays the rates of school misconduct for adolescents working more or less than 20 hours per week in perceived autonomous and less autonomous work environments. The figure suggests an interaction effect: high autonomy in the workplace exacerbates the effects of

work hours on school deviance. In this sample, adolescents who reported greater “freedom” or “control” at work were more likely to have problems in school as work hours intensified.

Taken together, this research suggests that employment programs operate differently for younger and older offenders, and that high-quality work can further reduce rates of recidivism for adult workers. The limited research on adolescent work quality and deviance suggests that the conditions of work signaling a high-quality job in adulthood may actually increase rates of misconduct among youth. We next examine the effects of work programs on a substantial and fast growing portion of the U.S. correctional population: offenders in prison for drug use or drug crimes.

Drugs, Employment, and Crime

If drug-involved offenders are given jobs, will they commit less of the economic crime associated with drug use?

The number of prisoners incarcerated for drug use, distribution, or manufacturing has risen dramatically in the past 20 years. According to the repeated cross sections of the National Survey of State Prison

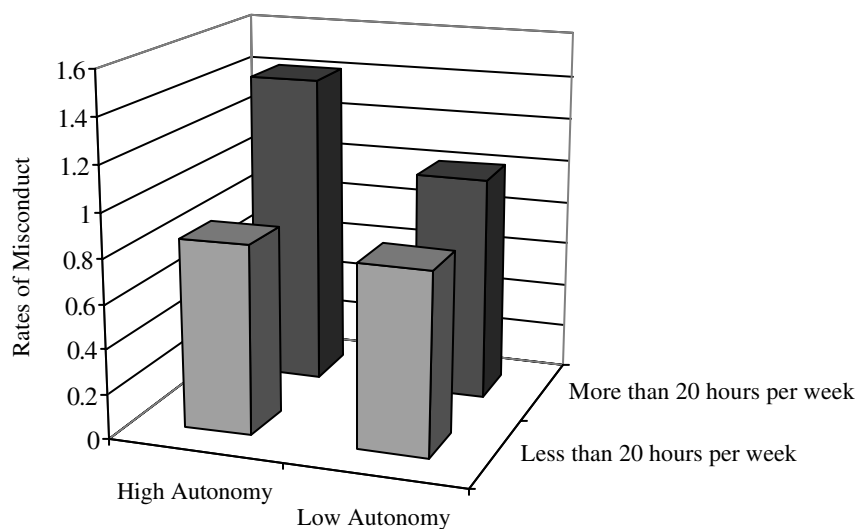


Figure 4. Adolescent rates of school misconduct by work intensity and autonomy.^{a,b}

^aN = 644

^banalysis of variance ($F = 6.45, p < .001, df = 3$)

Inmates, the percentage of state prisoners incarcerated for drug offenses has risen from less than 10 percent in the 1979 and 1986 surveys to more than 20 percent in the 1991 and 1997 surveys. Drug offenders in federal prison rose from 58 percent of all inmates in 1991 to 63 percent in 1997 (U.S. Department of Justice, 2000a). Given this growth in drug-involved offenders, the effectiveness of work programs on rates of recidivism must also be considered for ex-addicts.

The prevalence of crimes that involve previous drug use also warrants a special consideration of drug users in the correctional population. In 1997, 37 percent of state prisoners and 20 percent of federal prisoners were under the influence of alcohol when they committed their most recent offense, whereas 33 percent of state and 22 percent of federal prisoners were under the influence of drugs (U.S. Department of Justice, 2000a). If drug offenders can obtain money

through legitimate work, will they be less likely to commit new offenses?

As with previous research on the effects of work programs, again the problem of self-selection can render the effects spurious—less addicted or dependent drug addicts may be more willing or able to secure employment. To address the problem of self-selection to work, and possible bias in the effects of work on drug use, Uggen and Thompson (1999) analyzed experimental data from the Supported Work ex-addict sample as well as a fixed-effect model of within-person change. In each case, employment appeared to reduce serious economic crime but not substance use among ex-addicts (Dickinson & Maynard, 1981; Uggen and Thompson, 2000).

Figure 5 displays time to first robbery or burglary arrest for ex-addicts in the Supported Work data. The treatment group, or those ex-addicts assigned to supported employment, was significantly less likely to be

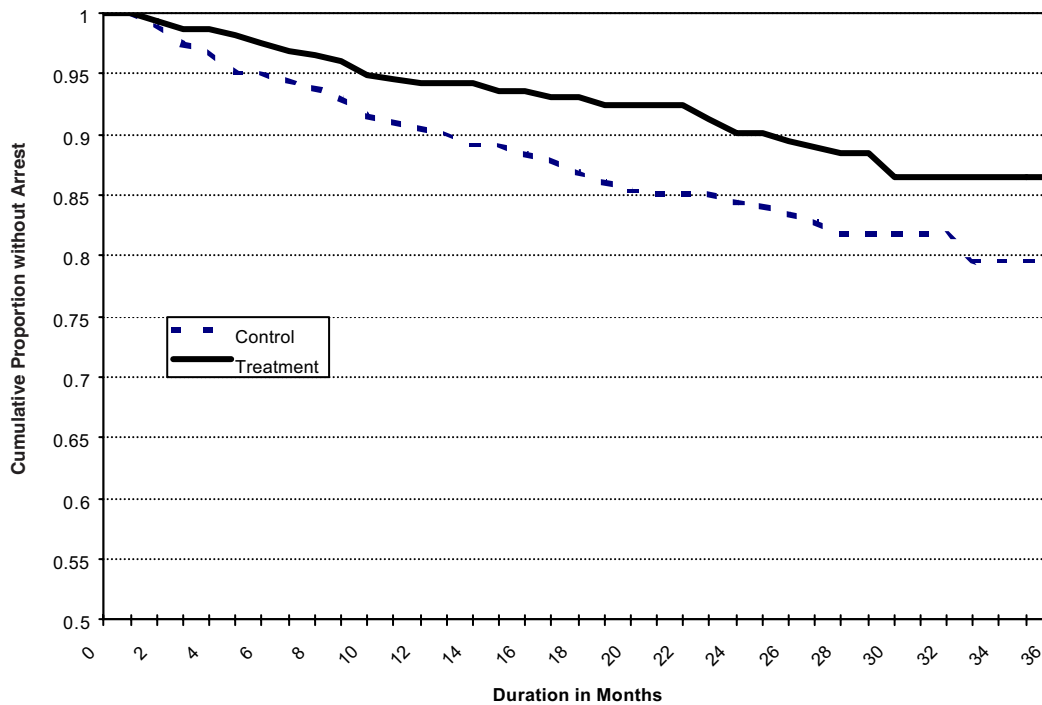


Figure 5. Time to arrest for robbery or burglary among supported work ex-addicts.^{a,b}

^aN = 1,063

^b $\chi^2 = 9.12 (1)$

Source: Uggen, C., & Thompson, M. (2000). The Socioeconomic Determinants of Ill-Gotten Gains: Within-Person Changes in Drug Use and Illegal Earnings. Paper presented at American Sociological Association Meetings, Chicago.

arrested than those assigned to the control condition. By the end of the follow-up period, less than 15 percent of the experimental group had been arrested for a burglary or robbery, whereas more than 20 percent had been arrested in the control group. These results suggest that work programs for ex-addicts may be effective in reducing recidivism for serious economic offenses such as robbery or burglary.

The effect of supported employment on substance use for drug-involved offenders was less beneficial. Figure 6 displays time to heroin or cocaine use for ex-addicts in the Supported Work sample. The results show high failure rates in the first year of the program, with more than 30 percent of the control and experimental group using heroin or cocaine after 12 months. Overall, the work program had little effect on substance use for the ex-addict sample. By the end of the follow-up period, 58 percent of the control group and 55 percent of the experimental group had

yet to use heroin or cocaine, a difference that was not statistically significant.

Ex-addicts in the Supported Work sample were therefore likely to reduce their criminal activity but not their drug use when provided a subsidized job. Evaluations of nonexperimental programs have suggested that transitional programs for ex-addicts may assist them in finding employment. For example, Rossman, Sridharan, and Buck (1998) examined the Opportunities to Succeed Program, which provides supervision, job training, family services, and drug treatment for ex-addicts released from prison. Those provided services were more likely to have a job than a comparison group, although some critics have questioned the reliability and validity of the self-reported outcome information (Buck, 2000).

The well-established positive relationship between work hours and substance use in adolescence (Bachman & Schulenberg, 1993; McMorris & Uggen,

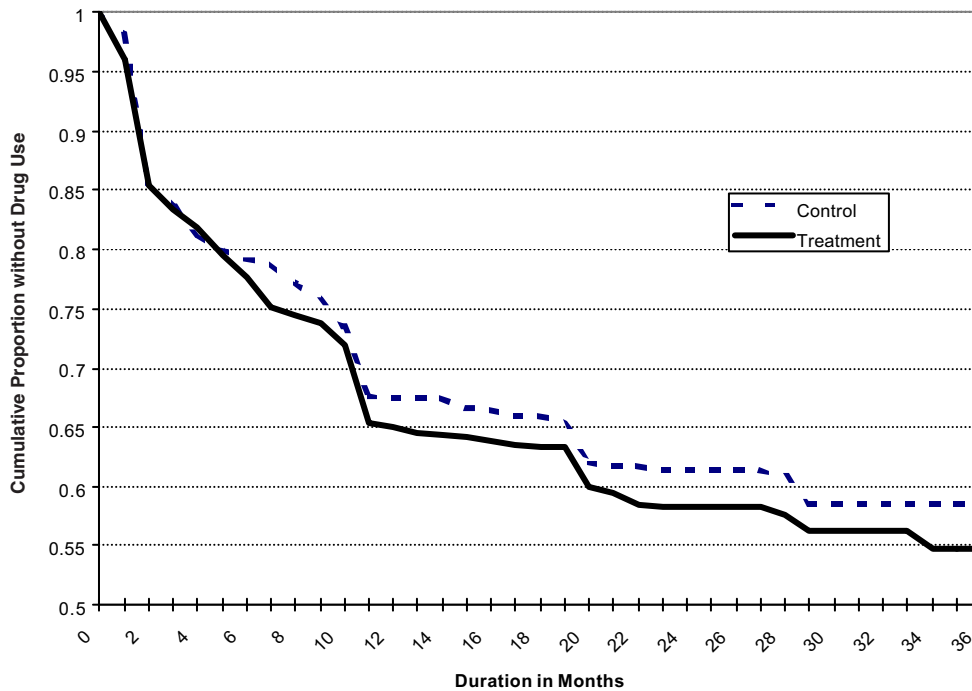


Figure 6. Time to self-reported cocaine or heroin use among supported work ex-addicts.^{a,b}

^aN = 1,156

^b $\chi^2 = 1.01 (1)$

Source: Uggen, C., & Thompson, M. (2000). The Socioeconomic Determinants of Ill-Gotten Gains: Within-Person Changes in Drug Use and Illegal Earnings. Paper presented at American Sociological Association Meeting, Chicago.

2000; Mihalic & Elliot, 1997; Mortimer et al., 1996; Steinberg & Dornbusch, 1991; Steinberg et al., 1993) questions whether employment programs are the most appropriate mechanism to deal with *young* addicts. Our own preliminary analysis suggests that high-quality work does not reduce rates of drinking and smoking for adolescents in the general population as total hours of work per week increases. Again, the conditions of work that are considered advantageous for adults (high status, high earnings, and high autonomy) appear to increase substance use for adolescent workers. Staff and Uggen (2001), using Youth Development Study data, found higher rates of drinking for adolescents employed in more autonomous jobs net of the total hours worked per week. Figure 7 displays the rate of alcohol use in the twelfth grade by work intensity and the perceived autonomy of the work. Adolescents working more than 20 hours per week in more autonomous jobs had the highest rates of alcohol consumption.

The null effects of programs such as Supported Work on future drug use for ex-addicts necessitates both an evaluation of other work programs and evaluations of nonwork treatment programs. For example, research on the effectiveness of prison-based drug treatment for addicts is promising (for a complete review, see Mackenzie, 1998). Evaluations of

therapeutic communities for drug addicts suggest that treatment programs in prison may reduce rates of recidivism among ex-addicts (Wexler, 1995). Although critics have noted a high attrition rate and other methodological problems in many of these evaluations (Mackenzie, 1998), the effect of inpatient drug treatment remains encouraging for increasing employment and reducing recidivism for ex-addicts.

The limited research on job programs and therapeutic drug treatment in prison suggests that ex-addicts may respond differently to work programs than do nonaddicts. A more comprehensive program of therapeutic drug treatment while in prison, followed by employment and training programming after release, may prove beneficial in preventing both future crime and future drug use among drug-involved offenders. Nonexperimental evaluations of such programs, for example the Key-Crest Program in the Delaware correctional system, have suggested that drug treatment followed by work release programs may be a promising approach for reducing drug use and rearrest (Martin, Butzin, & Inciardi, 1995).

Summary Findings and Future Questions

The kernel notion this review explored is whether entry into employment is a “turning point” (Elder,

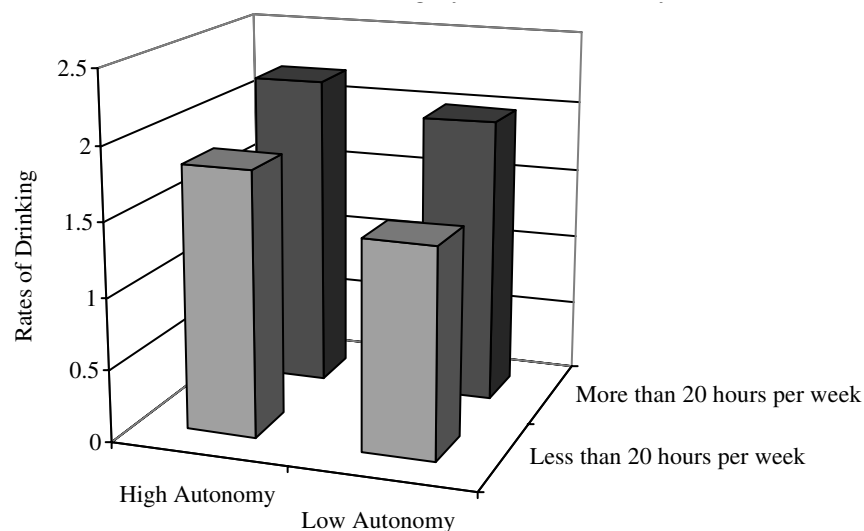


Figure 7. Adolescent rates of drinking by work intensity and autonomy^{a,b}

^a $N = 699$

^banalysis of variance ($F = 6.68, p < .001, df = 3$)

1985) in the lives of criminal offenders. Previous research leads us to conclude that work, especially for older ex-offenders, can be a turning point toward a more conventional lifestyle. Despite this general finding, the effects of work programs are often modest and limited to certain subgroups of offenders. Nevertheless, we find enough sound experimental evidence of program effectiveness to conclude that employment remains a viable avenue for reducing crime and recidivism.

For example, research suggests that older offenders are especially receptive to postrelease employment programs, even when they are short-term and limited in quality, and that employment programs may ease their transition back into society. The effectiveness of short-term work programs for young offenders is less encouraging; most evaluations find that subsidized employment does not reduce recidivism for adolescents and young adults. However, evaluations of long-term residential programs that emphasize vocational training, placement, and education offer some promise for reducing crime among at-risk or released adolescents.

We also find some evidence that the quality of employment may be important for reducing recidivism in work programs. In nonexperimental studies, ex-offenders who obtained high-quality employment, such as skilled craft work, were less likely to be rearrested than those who obtained poor-quality work. The response to work quality, however, also appears to be age-graded, although it remains unclear whether assigning young offenders to high-quality work would reduce recidivism in the same way as adults. Criminological theory suggests that youth have less attachment to the labor market, and preliminary evidence suggests that high-quality work may increase deviance and substance use for adolescents in the general population. Still, we are hesitant to draw conclusions for the effects of work quality on young offenders based on the scattered observational studies conducted to date.

Finally, work programs appear to be helpful in reintegrating the growing number of drug-involved offenders in prison. Research has suggested that employment programs can reduce rates of rearrest among ex-addicts, although prison-based drug treatment programs may be more effective for reducing substance use. Perhaps a program combining treatment, vocational training, and employment services

would be most effective for reducing recidivism to both crime and drug use.

In this review, we have built on existing literature and evaluations for work programs for ex-offenders. However, there is still much we do not know. Concerning the work and crime relationship, at least four key questions remain unanswered. First, what are the long-term job prospects for ex-offenders 10, 20, or 30 years after release? For example, how have participants in programs such as Supported Work fared in the ensuing decades? Was the experience a true turning point in their lives that altered long-term trajectories? Second, are ex-offenders better off working among other ex-offenders or with non-offenders? Although assigning inmates to work together may allow for peer support in this transition, the work programs themselves could also be criminogenic. For example, the ex-addicts in the Supported Work program did not differ from the controls in time until drug use. However, the program may have been more beneficial if ex-addicts had not been placed together. If one crew member experiences a relapse, are the others likely to follow? Third, future research needs to explore the interactions between formal and informal controls. Do ties to work and family alter the effectiveness of correctional interventions? Sherman and Smith (1992) find that arrest has a greater deterrent effect among employed persons and Kruttschnitt et al. (2000) find that sex offender treatment appears to work better among those with a history of job stability. Future employment and training programs for offenders may be more efficacious if they are combined with family support programs that will increase informal social controls, and conditional release that will increase formal controls. Finally, what features of employment and training programs are most attractive to offenders? Attitudinal surveys and process analysis of existing programs could help to identify the most salient features of job programs necessary to maximize participation rates and program effectiveness.

Despite these unanswered questions, we can reach the following provisional conclusion: Postrelease employment and training programs, especially those providing jobs of moderate or high quality, are particularly promising for reducing recidivism among older and drug-involved offenders. We are hesitant to conclude, however, that work programs cannot be beneficial for younger offenders, only that existing

initiatives have been less successful for this group. We suggest further experimentation (perhaps involving preemployment skills or work habits training) for younger offenders in the correctional population.

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