

# Chapter 5

## Education, Employment, and Recidivism: A Review of the Literature

### 5.1 INTRODUCTION

Research has consistently found higher levels of education and employment and lower levels of crime to be highly correlated. Although there is abundant research examining the correlates and causes of juvenile crime and delinquency, much less is known about factors that lead juvenile offenders to stop committing crime. Mulvey and colleagues (2004: 2-3) note that longitudinal research over the past two decades has better illuminated the development of antisocial behavior among adolescents, including “the course of particular behavior patterns over different periods of development[,]...the strength of certain factors in promoting the onset or maintenance of antisocial or disordered behavior...” and “patterns of behavior or offending over the course of development that might distinguish certain subtypes” of antisocial or deviant adolescents. They emphasize, however, that social scientists know much more about what leads adolescents to engage in acts of crime and deviance than about what leads adolescents away from criminal and deviant behavior.

Proponents of a life course perspective of crime and deviance address the issue of crime desistance by emphasizing continuity and change in criminal behavior over time. The perspective recognizes both stable and variable psychological, biological, and social factors that directly and indirectly influence the onset and continuation of one’s criminal behavior, as well as his or her eventual desistance from crime. Sampson and Laub (1993, 2003) emphasize the importance of social bonds in an individual’s desistance from criminal activity. Thus, they would explain the effect of education or employment on recidivism as a result of developing bonds to conventional norms that lead to attachment and commitment to conventional society. They argue that life events can serve as turning points for changes in adolescent offending behavior and lead juveniles to desist from criminal activity. However, few studies have attempted to identify events that might serve as turning points for juvenile offenders.

This review examines the literature on education, employment, and recidivism in order to identify what is known about whether education or employment might serve as a turning point for juvenile offenders. Section 5.2 summarizes the literature on the relationship between education and recidivism, followed by section 5.3 which reviews the relationship between employment and recidivism. In section 5.4, the relationship between education and employment and their combined effect on recidivism is explored. Section 5.5 reviews the literature on various individual and community factors that may affect these relationships. Finally, section 5.6 provides a summary discussion of what is known about whether and how education and employment might act as turning points in the lives of juveniles who are returning to the community after being committed to a juvenile justice facility.

## 5.2 EDUCATION AND RECIDIVISM

Several studies have examined the relationship between education and recidivism among *adult* offenders. These studies provide strong support for the hypothesis that educational achievement decreases recidivism. For example, Nuttall, Hollmen, and Staley (2003) found that inmates in New York who earned a General Educational Development (GED) diploma while incarcerated were significantly less likely than those who did not earn a GED to return to prison. The effect was greater for inmates under the age of 21; however, inmates older than 21 who earned a GED still experienced a significant reduction in the likelihood of recidivism compared to inmates who did not receive a GED while in prison.

Three studies have employed the statistical analysis technique known as meta-analysis, which allows researchers to statistically assess results across several studies to examine the education-recidivism link among samples of adult offenders. All of these meta-analyses have supported the finding that education reduces recidivism. Aos, Miller, and Drake (2006) analyzed seven rigorous evaluations of in-prison adult basic education programs and found that the programs reduce recidivism rates of participants by about 5%. Chappell (2004) examined the effects of post-secondary education across 15 studies and found that participating in post-secondary education while in prison reduced recidivism rates by about 50%.

In addition, the reduction in recidivism rates was greatest for inmates who completed their educational program. Wilson, Gallagher, and MacKenzie (2000) conducted a meta-analysis of 33 separate studies of a variety of in-prison educational programming. They found reductions in recidivism rates for inmates who participated in GED/adult basic education and post-secondary education of 18% to 26%, respectively. However, meta-analysis is only as good as the individual studies included in the analysis. Wilson et al. (2000) caution against putting too much emphasis on the effect sizes, noting that 29 of the 33 studies included in their meta-analysis were of poor methodological quality and might reveal individual differences between inmates who participated in educational programming and inmates who did not. In other words, perhaps the differences in recidivism rates are due to differences in motivation or attachment to conventional norms and expectations between individuals who participated in educational programming while incarcerated and individuals who did not. Nevertheless, the findings certainly support the notion that education leads to positive outcomes for offenders.

A few studies have examined the effect of education on criminal activity as adolescents transition into adulthood. These longitudinal studies also provide support for a negative relationship between various education-related measures and crime. Arum and Beattie (1999) found that total years of education, high school grade point average (GPA), and the student-to-teacher ratio of one's high school significantly reduced the likelihood of adult incarceration among a national sample of juveniles in the U.S. Similarly, Bernberg and Krohn (2003) studied a sample of high-risk juveniles in Rochester, NY, and found that graduating from high school significantly decreased involvement in serious criminal activity at ages 21-22.

One thing to note is that many of these studies, including the meta-analyses by Chappell (2004) and Wilson et al. (2000), examined the link between education and recidivism among *adult* offenders. Less research has focused specifically on the relationship between

education and desistance from criminal activity among *juveniles*, particularly crime desistance following a period of commitment or detention in a juvenile justice facility. Nevertheless, the studies that have focused on the education-recidivism link for juvenile offenders (Blomberg et al., under review; Bullis et al., 2002; Lipsey & Wilson, 1998; Ambrose & Lester, 1988) support the general finding that education reduces recidivism among juveniles.

Some studies have examined the link between earning a high school diploma or its equivalent and recidivism for juvenile offenders. For example, Ambrose and Lester (1988) found that juvenile offenders with a high school diploma or the equivalent were significantly less likely than those without a high school diploma (22% versus 41%, respectively) to recidivate during the first year following release.

The Pathways to Desistance Study is a longitudinal study that is attempting to determine more about how, why, and under what conditions serious juvenile offenders stop offending. The study is tracking 1,355 serious offenders between the ages of 14 and 17 in two cities over a period of eight years. Preliminary findings indicate that, with respect to education and returning to school following release from commitment, only about one third of the 1,355 youths were school-eligible at the time of release (Griffin, 2006). (The other two thirds had turned 18 or obtained a high school diploma or GED while committed.)

Of the approximately 450 juveniles who were school-eligible at release, nine out of 10 returned to school following release and had at least one month of regular school attendance. Thus, school reintegration appears to be occurring for those youth who should be returning to school (Griffin, 2006). However, most juvenile offenders for numerous reasons such as age, eligibility, and short lengths of stay are not able to graduate from high school while committed. Therefore, the majority of youth being released have not completed high school, which limits these studies to smaller samples of older youth who completed high school prior to release.

Low levels of academic achievement, school attendance, and graduation rates are all correlated with the involvement of youth in crime and the criminal justice system (Winters, 1997). Wang, Blomberg, and Li (2005) found that committed delinquent youths were significantly more likely to have lower grade point averages and attendance rates and were significantly less likely to be promoted to the next grade level compared to nondelinquent public school students. Research consistently supports the notion that academic achievement decreases criminal involvement among various groups of adolescents and adults. Sampson and Laub (1993) found that, for a sample of 907 males, attachment to school had a significant negative effect on delinquency.

In addition, several surveys of adolescents have found that juveniles are significantly less involved in crime and delinquency when they are committed and attached to school, spend significant time studying, and make good grades (Cernkovich and Giordano, 1992; Massey and Krohn, 1986; Stewart, 2003; Thaxton and Agnew, 2004). Cottle, Lee and Heilbrun (2001) conducted a meta-analysis of 22 recidivism studies on juvenile offenders. They found that educational disability, low achievement test scores, and lower full-scale and verbal IQ scores were all related to recidivism. In their meta-analysis of intervention programs for committed youth, Lipsey and Wilson (1998) found that programs focused on educational achievement and structured learning could reduce recidivism among juvenile offenders.

Blomberg, Pesta, Bales, Johnston, and Berk (under review) examined the link between educational achievement and recidivism using data on a cohort of 4,147 youths committed to 115 juvenile justice institutions in Florida. Blomberg et al. used return to school and regular school attendance post release as an indicator of school attachment. They found that youth who experienced greater academic achievement (as measured by earning core academic credits while committed) were more likely to attend school after release; and attendance in school resulted in youth being less likely to be rearrested within the first two years following their release. Thus, academic achievement, return to school, and regular school attendance were positively related to each other and negatively related to recidivism.

Bullis, Yovanoff, Mueller & Havel (2002) conducted a five-year longitudinal study of 531 juvenile offenders committed in Oregon. They found that youth who were participating in school after release were less likely to recidivate. However, less than one half of the youth were working or in school six months after release. The proportion dropped to less than one third at 12 months post release. Thus, although participation in school affected recidivism, few juvenile offenders became engaged in school following release from commitment, and even fewer juveniles remained engaged in school over time.

Based upon the findings of the prior studies, education as measured by the attainment of a high school diploma or its equivalent, academic achievement, and attachment to school post release has, in varying degrees, been found to reduce recidivism. However, many juvenile delinquents do not return to school after release, dropout, and/or do not complete high school. In addition, returning to school after release may not be a realistic option for older youth who are far behind in school. Given that prior research on adult offenders' desistance from crime through employment has been well documented, the following section reviews the literature on employment and recidivism for both adults and juveniles.

### **5.3 EMPLOYMENT AND RECIDIVISM**

The link between employment and crime is also well established: unemployment is highly correlated with crime. Allan and Steffensmeier (1989) found that unemployment is associated with high arrest rates for juveniles and young adults and, for young adults, low quality of employment is associated with high arrest rates. Research also suggests that employment, like education, significantly reduces recidivism among juveniles. Bernburg and Krohn (2003) found that employment in early adulthood significantly reduces crime after adolescent criminal involvement.

Sampson and Laub (1993) analyzed longitudinal survey data and found that employment significantly decreased criminal behavior. They found that, even after controlling for adolescent crime and delinquency, job stability from ages 17 to 25 significantly decreased crime during those years, as well as from ages 25-32. Thus, the effect of job stability on crime continued well beyond the period of employment. Males who experienced job stability between ages 17 and 25 continued to benefit from their employment experience from age 25 to 32. Preliminary results from the Pathways to Desistance Study indicate that, although nearly half of the sample obtained employment after release, youth only kept the jobs for an average of two months (Griffin, 2006). Thus, if job stability is more important for crime desistance than merely having a job (Sampson & Laub, 1993), early indicators of employment do not bode well for the juvenile offenders in the Pathways to Desistance Study.

Other studies have examined the effect of employment programs for committed juvenile offenders on criminal involvement following their release from commitment. The employment programs vary in type and scope and include career training, institutional jobs, work-release programs, and programs that help offenders find work or place them in jobs in the community. As noted by Mulvey et al. (2004), the few meta-analyses of interventions for juvenile offenders have found that programs focusing on adolescent “human capital development (jobs and job skills)” are more effective than punitive interventions (See, for example, Andrews et al., 1990; Lipsey & Wilson, 1998; Aos, Phipps, Barnoski & Leib, 1999.).

The meta-analysis conducted by Wilson et al. (2000) included 21 analyses of employment programs for offenders. The results indicated that participation in career programs increased later employment and decreased recidivism. The authors emphasized the extraordinary variation across the 21 analyses, which suggested that some programs were much more effective than others. Aos et al. (2006) conducted a meta-analysis of 16 employment programs that included community employment training and job assistance and found modest but statistically significant reductions in recidivism. They also analyzed three in-prison career education programs and found that they resulted in a 12.6% reduction in recidivism rates.

Again, however, one must interpret these results with caution. Not only are meta-analytic techniques limited by the quality of the studies included in the meta-analysis, but the meta-analyses described here are all examining the effect of employment programs on recidivism, not the effect of employment, per se. While career training or job assistance might improve one’s chances of obtaining stable employment, such a result is not definitive. These studies did not determine whether offenders who participated in employment programs actually found employment upon their release. Nevertheless, these meta-analyses of employment programs provide support for the general finding that employment is associated with a reduction in recidivism.

Unlike the studies of employment programming that must assume an employment effect, the National Supported Work Demonstration Project provided minimum-wage jobs in addition to career training. Uggen’s (2000) evaluation of the National Supported Work Demonstration Project found strong evidence of a link between employment and recidivism. The National Supported Work Demonstration Project randomly assigned committed offenders to an experimental or control group. Those in the experimental group received career training in prison and minimum-wage jobs (in construction or the service industry) upon release.

For offenders who were 26-years-old or younger, Uggen found no difference in recidivism between the two groups. However, for offenders older than 26, the program significantly reduced recidivism. Beginning about six months after release, those in the experimental group showed a significantly lower likelihood of arrest. The difference continued for the duration of the study (three years post release), at which point 53% of the control group had been re-arrested, compared to 42% of the experimental group.

Overall, the prior research strongly suggests that employment is significantly associated with crime. Longitudinal studies have found that employment--particularly stable employment--may reduce the likelihood of crime initiation among youth and the likelihood of recidivism among offender populations. However, little research has focused on the role of employment in reducing recidivism among juvenile offender populations; the findings

with respect to juvenile offenders are far from conclusive. Even less is known about the mechanism through which employment affects the desistance process. Cernkovich and Giordano (2001) suggest that the transition into the adult role of work makes involvement in crime less acceptable and useful. Additional research is needed on whether and how employment can reduce juvenile offenders' likelihood of recidivating following their return to the community after a period of commitment.

## **5.4 THE LINK AMONG EDUCATION, EMPLOYMENT, AND RECIDIVISM**

Exactly how education and/or employment might lead to desistance from criminal activity is not fully understood. As discussed earlier, one explanation of continuity and desistance is the effect of education or employment as an opportunity for developing bonds to conventional norms that lead to attachment and commitment to conventional society. Indeed, there is evidence that suggests independent effects of education and employment on recidivism, perhaps due to the binding nature of each of these social processes.

An alternative and compatible interpretation of the link among education, employment, and crime is that crime, and the stigma associated with it, limits one's access to conventional opportunities. Educational attainment restores access to some of the employment opportunities an offender might have lost as a result of his or her criminal behavior. Thus, education increases one's opportunities for stable employment, which leads to a reduction in the likelihood of later crime. Indeed, there is evidence to suggest that education might affect recidivism by affecting one's prospects for future employment.

Wilson, Gallagher, and MacKenzie (2000) found that adult inmates who completed programming and earned a GED or participated in post-secondary education were significantly less likely to recidivate and had a significantly greater likelihood of obtaining post-release employment: The average odds of being employed upon release were 70% greater for offenders who participated in educational programming while in prison. The authors observed that the reduction in recidivism for offenders who participated in educational programming was likely due to their greater employability. Fabelo (2002) reported a similar finding from an evaluation of educational programming for 32,020 adult inmates in Texas: Offenders receiving in-prison education were significantly more likely to find employment after release, received higher wages, and had lower rates of recidivism than inmates who had not received educational programming while committed.

Further support for the possibility that educational attainment affects later crime by affecting chances for obtaining employment was provided by Bernburg and Krohn's (2003) analysis of data from a sample of high-risk juveniles in Rochester, New York. Bernburg and Krohn found that graduating from high school significantly decreased involvement in serious crime at ages 21-22. They concluded that the effect of completing high school on later crime was explained in large part by the greater ability of high school graduates to gain employment. In other words, Bernburg and Krohn (2003) found that completing high school decreased crime in young adulthood precisely because of its positive effect on later employment.

These findings suggest that educational advancement might be important for pre-offenders, who will later depend on prior educational attainment for better employment opportunities.

However, employment may not be a viable option for younger youth or youth with very low levels of educational attainment. For example, some studies have indicated that direct entrance into full-time employment may not be possible, either because younger individuals may not be ready to commit to the demands of full-time employment or because employers may not be interested in hiring them (Harrison and Schehr, 2004; Shover, 1996; Uggen, 2000).

Ainsworth and Roscigno (2005) found that career training during high school was related to significant reductions in the likelihood of completing high school and attending college. Thus, high school career training might also be associated with constrained employment opportunities later in life. For juvenile offenders, educational programming may provide the foundation needed to take advantage of employment opportunities that will emerge at a later time, while offenders who already have attained a certain level of education might be in a better position to benefit from career training and employment programs.

Life course criminologists like Sampson and Laub (1993) argue for an age-graded theory of crime, as well as age-graded strategies for dealing with people who commit crimes. They believe that the causes of crime may differ for people at different stages of the life course, and similarly, the best strategies for preventing crime are those which are age appropriate. In other words, the effects of employment and education on recidivism are believed to vary over the life course. It follows, then, that education might effectively reduce crime for individuals at one stage in the life course, but employment might be more effective for individuals at a different point in their lives. Some of the work that has been done in this area suggests that employment programs are more effective for older offenders, while educational programs are more effective for younger offenders (Uggen & Staff, 2001).

In fact, past research has indicated that employment during adolescence is *positively* related to crime (Ploeger, 1997; also see Apel et al., forthcoming). In other words, research has found that employment during adolescence may actually increase criminal behavior and other forms of delinquency. Researchers have hypothesized that this is because employment, especially when the youth works many hours per week, may result in weaker attachment to school, lower academic achievement, and, in general, may distract the individual from educational pursuits that are more central to long-term success.

As adolescents transition into early adulthood, however, employment becomes a key source of conventional social bonds as individuals move beyond the typical school years. Shover (1996) comments on this in discussing desistance from crime among professional thieves, noting that legal employment may reinforce a conventional, noncriminal identity for older offenders in a way that far exceeds what would be true for younger offenders. Certainly Uggen's (2000) analysis largely supported this pattern.

Taken together, these results suggest that although older offenders appear to benefit from education and employment programs (particularly employment programs that provide actual jobs), younger offenders appear to benefit more from programs that include education. In fact, younger offenders appear to experience little benefit from employment-only programs. In addition, career training before juveniles have acquired a high school education may decrease their chances of completing high school (Ainsworth and Roscigno, 2005), which, in turn, could limit their future employment opportunities. Younger offenders, therefore, may benefit most from educational programs or comprehensive programs that emphasize both education and job training. These programs offer juveniles the preparation

needed to capitalize on employment opportunities that will be more available and more life-course appropriate at later ages.

If, in fact, older offenders benefit more than juveniles from employment, at what age does employment have a greater effect than education on recidivism? Only one study has attempted to answer this question. Uggen (2000) evaluated the National Supported Work Demonstration Project, which randomly assigned offenders to the treatment program that included in-prison career training and post-release job placement. Uggen found that, for offenders who were age 26 or younger at the time of release, there were no differences in survival rates (i.e., successful avoidance of re-arrest) between those who participated in the employment program and those who did not. However, for offenders who were 27 or older, the program successfully prevented crime.

Clearly, education and employment are closely interrelated in important ways. However, additional research is needed to better understand the process by which education and employment interact with each other and with characteristics of the offender to influence the desistance process. There is little evidence that would strongly favor one of these approaches over the other.

The meta-analysis of correctional programming evaluations by Wilson et al. (2000) provided slight evidence in favor of educational programming. They included separate analyses for employment and educational programming. Their analysis revealed that participation in educational programs had a significant, overall effect on recidivism. Employment programs, on the other hand, did not have a significant effect on recidivism, although all of the effects of employment were in the predicted direction (i.e., employment training reduced recidivism). Much research is needed before we have a clear understanding of the different processes by which education and employment independently affect recidivism, how education and employment interact with each other to reduce crime, and how these processes might differ for adult and juvenile offenders.

## **5.5 INDIVIDUAL AND COMMUNITY CHARACTERISTICS**

The life course perspective acknowledges the importance of individual- and community-level factors throughout the life course. It is generally accepted that factors such as age, race, and socioeconomic status, as well as community disadvantage, are related to crime in various ways. It is also likely that these factors are correlated with recidivism or, conversely, desistance from crime. However, little is known about exactly how various individual- and community-level characteristics directly or indirectly influence the desistance process.

Certainly a number of factors have been shown to be related to educational achievement and attachment, as well as to various employment outcomes. Demographic and social status variables affect one's educational success. Studies have found that educational success is lower for males (Jacobs, 1996), Blacks and Hispanics (Gamoran, 2001), those living with single parents (Astone & McLanahan, 1991), and those whose parents are less educated (Dumais, 2002). Additionally, various dimensions of the child's personality affect key indicators of school success (Cucina and Vasilopoulos, 2005; Kaiser and McLeod, 2004).

There also is evidence to suggest that, independent of individual characteristics, features of the broader social environment affect the likelihood of educational success. For example, Johnson, Crosnoe, and Elder (2001) found that children were more highly attached to school

when they attended schools that had a high concentration of students of their same race and ethnicity. Cernkovich and Giordano (1992), however, found that the racial composition of the school does not moderate the effect of school bonding on delinquency. Research has also shown that school characteristics can directly influence delinquency (e.g., Felson, Liska, South & McNulty, 1994; Jang, 1999). Additionally, there is growing evidence that neighborhood levels of poverty or affluence independently affect individual academic achievement (Duncan and Brooks-Gunn, 1997).

The presence of disabilities has been associated with a greater likelihood of juvenile recidivism (Leon, Rutherford, & Nelson, 1991; Wagner, 1992). A longitudinal study by Bullis et al. (2002) found that 58% of the juvenile offenders in their study had a disability and were less likely to be engaged in work or school and more likely to recidivate than those without a disability. Given the high proportion of juvenile offenders with educational disabilities (Wang et al., 2005; Wolford, 2000) and the effect of such disabilities on educational achievement and recidivism, it is important to understand whether the effect of education or employment on recidivism among this population is different than that for juvenile offenders without disabilities.

Perhaps juveniles with learning disabilities would benefit more from employment programs than education programs. Or, alternatively, juveniles with learning disabilities may benefit more from education programs that intensively target their special needs and create an opportunity for education to become a stronger social bond for these youth. Research has not yet addressed these issues.

It is not surprising that these same individual- and community-level variables predict various employment outcomes (Caspi et al., 1998). Moreover, educational success remains the strongest and most consistent predictor of later employment success (Chen and Kaplan, 2003); these variables, therefore, might influence employment outcomes directly or indirectly through their effect on educational achievement.

Interestingly, these variables are similar to the demographic and social status variables that affect involvement in crime and delinquency; thus, there is reason to believe that they could also affect desistance from crime. Indeed, Loeber et al. (1991) found that for juvenile offenders the factors associated with the onset of criminal activity were the same factors associated with desistance. These variables might also affect desistance from crime through their influence on education or employment outcomes. Saylor and Gaes (2001) found that minorities (defined on the basis of race or ethnicity) benefited more from career training and industrial training in prison. The effects of these types of training programs on recidivism were much larger for minority offenders.

Tanner, Davies, and O'Grady (1999) found differences for males and females in their study of the effect of adolescent delinquency on adult employment and education outcomes. Using longitudinal data, they found that delinquent and criminal behavior and contact with the criminal justice system between the ages of 14 and 17 had a significant negative effect on educational attainment among males and females. However, these factors had a negative impact on occupational outcomes for males but not for females. These findings might suggest that male juvenile offenders would benefit from both education and employment programs, whereas female juvenile offenders might benefit more from programs that focus on education, because employment outcomes of this group did not seem to be affected by contact with the criminal justice system.

There are other factors that have yet to be examined in research on juvenile recidivism. For example, Ambrose and Lester (1988) suggest that factors such as an individual's ability and willingness to set goals and carry out the steps necessary to accomplish goals may also play a role in reducing recidivism among youth. One would also expect such factors to affect the education and employment experiences of youth. There are other factors that may also affect an individual's ability to form strong social bonds through his/her involvement in educational or employment pursuits. Exactly which individual and community factors influence whether juvenile offenders stop committing crimes and how these factors affect the desistance process is something that needs to be explored further.

In sum, research provides strong evidence of a relationship between various individual and community characteristics and recidivism or desistance from crime among juvenile offenders. Research to date also provides some evidence that suggests possible differential effects of employment and education for juvenile offenders with different individual characteristics who will be returning to different social settings. Again, this is another area where future research is warranted.

## **5.6 SUMMARY DISCUSSION**

The research to date that has examined the effect of education and employment on recidivism among juvenile offenders suggests that both education and employment may have a positive impact on juveniles and lead to desistance from or termination of criminal behavior. Substantially more research has been done that examines the effects of education-related factors on recidivism among juvenile offenders while most of the research on the relationship between employment and recidivism has focused on adults. This might be due to research findings suggesting that education might be more important than employment for juvenile offenders, whereas adult offenders might benefit more from the effects of employment on reducing criminal behavior.

Unfortunately, insufficient research prevents the recognition of definitive conclusions about whether education or employment is more effective at reducing recidivism among juvenile offenders, particularly among serious offenders. Even less is known about the individual and community characteristics that might influence the effect of education or employment on criminal behavior. Clearly, however, education and employment are closely interrelated, and both appear to play a potentially important role in the lives of juvenile offenders as they return to their communities after release. The question of whether education or employment can function as turning points in the lives of youth that can serve to bind them to society and set them on a new life course in which they successfully desist from criminal activity remains to be answered. The next chapter addresses this important question.