

Hand - to - Hand Combat: Educational Programs Battle Recidivism Rates

Randall Fichte¹, Amanda Guerrero¹ and Georgie Ann Weatherby¹

Abstract

The primary focus of this research was to identify the effectiveness of education programs on reducing recidivism. This meta-analysis examined four published studies, a total of 21,113 offenders, which met the established criteria. This research assesses if the variables of age, gender or race influence the effectiveness of education programs. The criminological theories used to analyze the data were cumulative disadvantage theory, Robert Merton's adaptation of anomie theory and Burgess and Aker's adaptation of differential association theory. These theories will show the relationship between a positive life-changing event experienced during incarceration and the ability to remove a negative stigma of being a deviant. Also, these theories will help to understand why some social groups are more responsive to education programs than others and why some individuals continue to reoffend while others do not. The variance in data among individuals can be explained by several factors including an individual's ability to participate in education programs and the motivating factors for participating. Those who are able to participate in the programs may be less likely to reoffend upon release due to their qualifications that enable them to participate in programs. Motivation factors for participating in educational programs include a desire to further education, mandated participation by the court due to lack of education or the early release of an individual to reward good behavior. These factors can clarify some variance in data within similar groups. Through the meta-analysis, this research was able to conclude that education programs are effective in reducing recidivism rates. The most prominent indicators of success in the programs are age of the offender and educational commitment. A younger offender has not fully assumed the criminal identity or label of deviant; therefore they are more receptive to a positive life-changing event of educational experience. In addition, the longer an individual participates in the program, the less likely they are to reoffend.

Introduction

Throughout the history of the United States prison systems, the means of incarceration have changed dramatically over the past centuries.

¹ PhD, Department of Sociology & Criminal Justice, Gonzaga University.

The changes that have resulted in a movement from punitive measures, to rehabilitation and back to punitive means of incarceration are due primarily to society's shifting perspectives on criminal acts and criminals themselves. In the 1950s through the 1970s, the prison system embraced a medical model approach to incarceration in which prisoners were viewed as ill but could be treated and rehabilitated to reenter society as law abiding citizens. However, in the 1970s, this view of rehabilitation was deemed ineffective because it was believed that prisoners were not ill but rather were making rational, conscious decisions to commit crimes (Seiter and Kedela , 2003; Phelps, 2011). As a result, society developed a "tough on crime" attitude leading to policies that created harsher punishments focusing on deterrence and incapacitation, hoping to prevent future crimes, thus increasing the prison population extensively. Along with creating harsher punishments, new policies transformed the methods that were once used to help ease the reentry process for criminals back into society. Although the rehabilitative programs once used for reforming prisoners were deemed unsuccessful, the lack of program use increases the challenges convicts endure when trying to reintegrate into society (Seiter and Kadela, 2003).

One of the leading forces in movement from rehabilitation was Martinson's report that proclaimed, "nothing works" in terms of inmate reform and that programs do not help reduce recidivism rates (Phelps, 2011). The current research is going to examine the effectiveness of educational programs on reducing recidivism rates in prison, exploring the variables of age, gender, and race of offenders. The definition of recidivism that will be used throughout the study is any occasion in which an offender is re-incarcerated within 3 years of being released from prison, whether it is for new crime convictions or probation violations (Martin, 2003).

In the process of analyzing the effectiveness of educational programs on reducing recidivism rates, theories that will be examined: Labeling theory, Control theory, Cumulative Disadvantage theory, Differential Association theory, and Anomie theory. Labeling theory describes "deviance as not a quality of the act the person commits, but rather a consequence of the application by others of the rules and sanctions to an 'offender'" (Liska and Messner, 1999).

Control theory demonstrates how most people are tempted to deviate from the norms but forces imposed on them restrict them; yet when these controlling forces collapse, deviant behavior increases (Traub and Little, 1999).

Sampson and Laub (1997) developed a hybrid theory called cumulative disadvantage theory, blending control theory and labeling theory. Cumulative disadvantage theory suggests anti-social behavior experienced as a juvenile may predict deviant behavior as an adult, however, a positive life change can alter one's self-concept avoiding the harmful effects of being stigmatized with a negative label (Sampson and Laub, 1997). Differential Association theory maintains the idea that "individuals learn criminal techniques and motives in association with others, in exactly the same ways they learn noncriminal behavior and motives" (Traub and Little, 1999). Anomie theory as suggested by Durkheim is "social rules that become less binding due to decreasing consensus in complex society, developing a condition of normlessness" (Traub and Little, 1999). Merton's anomie theory proposes, "people in society who do not find legitimate ways of attaining success will turn to illegitimate means, based on the assumption that these illegitimate opportunities will lead to success" (Traub and Little, 1999:129). Through the exploration of these social theories, this paper will examine how education programs in prison and recidivism rates are connected with offenders' behavior in relation to society, thus answering the following questions: Does one's age influence one's participation in rehabilitative programs? Are people of a particular race more likely than others, to take advantage of educational programs offered? Finally, what role does gender play in the effectiveness of educational programs and recidivism rates?

Literature Review

A Brief History

One of the main concerns within the criminal justice system is the exponential growth of the prison population within the past forty years. The national prison population annual growth rate is 1.9 percent, which is double the growth rate of the actual national population (Sedgley, Scott, Williams and Derrick, 2008). There are currently 2.3 million adults incarcerated in our prisons today, which is the equivalent of 1 in every 100 adults being incarcerated at any given time (Yamatani and Spjeldnes, 2011). If this growth rate continues, the prison population will double within the next 34 years. A large proportion of the incarcerated individuals are repeat offenders.

Almost half of all inmates that are released will return to prison or jail within three years (May and Brown, 2011).

Recidivism has been an issue for the United States for decades. Over the last fifty years, the nation has shifted policies and beliefs on how to approach criminal behavior.

The medical model of treatment for criminal behavior was popular in the 1950s through the 1970s. The medical model would treat criminal behavior as a sickness that needed to be cured. Rehabilitation was a primary concern for correctional facilities. However, there would be a national shift away from the medical model in the 1970s, due to D. Lipton, Robert Martinson and J. Wilk's meta-analysis that would compare different rehabilitation programs to identify their ineffectiveness. They concluded that nothing works to reduce recidivism. Their report was titled "Nothing Works," and this document would influence a significant change in how America would treat incarcerated individuals (Lahm, 2009; Phelps, 2011).

The Martinson document, "Nothing Works," was very popular and influenced the shift to strict and longer prison sentences for felons. This philosophy was influenced by the theory that crime is a rational choice. Individuals would rationally choose to commit a criminal act based upon a cost benefit analysis (Spohn and Holleran, 2002). This theory gained popularity among politicians and voters because it was easy to comprehend and promote. The rational choice theory of crime would help reignite the idea that America needs to be "Tough on Crime" to deter criminal behavior (Seiter and Kadela, 2003; Spohn and Holleran, 2002). The political movement of "Tough on Crime" and "Nothing Works" increased prison sentences and discontinued a considerable amount of funding for rehabilitation and education programs.

Legislation would continue to increase punitive action over the next few decades. The Comprehensive Crime Control Act of 1984 would further increase punishment for convicted felons. The legislation would eliminate federal parole boards, ensure consistency in sentencing among federal crimes, as well as reestablish the federal death penalty. It would also increase sentencing for drug crimes and would influence the "War on Drugs," which is one cause of the increase in prison populations (Spohn and Holleran, 2002). The 1994 crime legislation and Higher Education Reauthorization Act would further increase punishment and decrease opportunities for convicted felons (Rose, Reschenberg and Richards, 2010).

The legislation would instill the “three strike” penalty system for federal offenders that have been convicted of three or more violent felonies or drug trafficking violations.

The latent effects of this program have diminished funding for the few remaining education programs in prison. Nearly 350 college programs were terminated nationwide. This is due to the allocation of where the funding is spent. The United States will spend over 20 billion in corrections and only 6 percent of that will go to education programs, while the rest will go to construction and maintaining new facilities to accommodate the increasing prison populations (Lahm, 2009). However, the death penalty and life in prison without parole has proven to reduce recidivism as a specific deterrence.

Although the “Tough on Crime” trend is still popular in American culture, the increasing incarceration rates are becoming too detrimental for the criminal justice system. The Second Chance Act of 2007 was instilled to shift back to the rehabilitation and reintegration of individuals into society. The act was signed to hopefully reduce incarceration rates, recidivism and the overall costs of a large prison population. The main proponents of the legislation are to provide grants to local and state governments as well as non-profit organizations for services like housing, health care, drug treatment, and employment training programs (Yamatani and Spjeldnes, 2011). This progression has highlighted possible areas of improvement in rehabilitation programs with concerns devoted to individual issues as opposed to using prison as a one size fits all for crime.

Why is Recidivism a BIG DEAL?

As previously mentioned, the United States is incarcerating more individuals each year than ever before. Hide Yamatani and Solveig Spjeldnes (2011) noted that “The United States represents only 5 percent of the world’s population, but we hold 25 percent of the world’s inmates in our prisons and jails” and nearly half of all released individuals are rearrested within a year. The high recidivism rates are problematic when considering techniques to reduce overall inmate population. Another overlooked concern is that approximately 95 percent of all inmates will eventually be released back into society at some point (Sedgley et al., 2008; Sieter and Kaela, 2003).

The increased amount of convicted felons being released back into society every year has raised political awareness about the need to change the current trend of felons reoffending.

Issues with Measuring Recidivism

There has been controversial data between scholars to identify if rehabilitation programs are actually effective. The primary issue is that scholars have failed to conceptualize what it means to recidivate and how is this measured. Some programs, like Job Corps, have identified recidivating as self-reported rearrests (Moses, 2012). Other studies identified recidivism as "any unfavorable movement of a parolee out of active parole supervision," which is predominantly measured as re-incarceration and absconding (Zhang, Roberts and Callanan, 2006). The first study only includes self-reported conviction, while the latter is only concerned with parolees getting incarcerated or fleeing. The latter study puts a time constriction on recidivism, while the Job Corps study has no time restraints. Although both studies provide recidivism rates, it is impossible to compare them because each study is measuring different variables.

Another issue with measuring recidivism is the lack of complete data. Data are problematic because they are usually based on crimes that are reported and lead to a conviction. Decentralization of the criminal justice system has led to different policies and practices on how recidivism is recorded (Spohn and Holleran, 2002). Also many institutions fail to track rates of recidivism (Yamatani and Spjeldnes, 2011). As a result, when scholars are measuring rates of recidivism, they are actually only measuring data of recorded recidivism. Given the issues with measuring recidivism, it is difficult to define the actual rates of recidivism (Maltz, 1984).

Issues with Measuring Rehabilitation Program Effectiveness

Scholars have agreed that it is difficult to measure a program's effectiveness because of the variation of quality of rehabilitation programs between prisons. This is caused by a decentralization of private, county, state and federal programs (Moses, 2012). Since there are a wide array of standards and policies, it has become difficult to compare the effectiveness of rehabilitation programs. In example, The National Supported Work Demonstration Project would randomly assign ex-offenders to minimum wage work crews.

The Comprehensive Employment and Training Act developed ex-offenders through “employment application assistance, resume preparation, role playing job interviews and some skills training” (Moses, 2012). Although both programs have been identified as providing job training, there is an obvious difference in the quality of each program. These differences should yield conflicting results of recidivism.

Another variable that has been identified as possibly skewing data are the actual individuals that are selected to participate in the program. Most studies do not rely on random assignment because it may be too difficult or even impossible to do. This is due to the fact that many individuals are not qualified to participate in certain programs. Rehabilitation programs are often merit based programs and only the most qualified individuals are allowed to partake in these programs. Many individuals who are selected or volunteer to participate in rehabilitation programs have different motivating factors for participating in the programs. Self-selection bias may skew the data because individuals that are chosen to participate in the program may be inherently different than the overall prison population (Rhodes, 2010; Rose et al., 2010).

Program evaluation is also difficult to compare because of the variance in the research model. Without random assignment to control and experimental groups, it is difficult to determine statistical bias and the overall effects it has on data results (Rhodes, 2010). As mentioned earlier, random assignment is difficult to achieve in a prison environment. Eric Jensen and Gary Reed established five levels of criteria for rating effectiveness of research methods. In their meta-analysis, they compared different studies that met a minimal standard of having a treatment and a non-treatment group with similar demographics, however random assignment was not absolute (Jensen and Reed, 2006). This has been one of the only documented research methods that has set criterion when considering the effectiveness of the research models and program evaluation.

Research That Has Shown Effectiveness of Rehabilitation Programs

Scholars have conducted many different research studies to identify what programs are working and what ones are not. The main focus of research has concentrated on education programs and job training.

Meta-analysis research has been the most beneficial in comparing the effectiveness of rehabilitation programs as a whole.

Education programs appear to show the highest effectiveness of all rehabilitation programs. The different levels of education programs range from Adult Based Education and General Education Development to postsecondary and college level education. Any level of education programs tends to reduce recidivism (Jensen and Reed, 2006; Seiter and Kadela, 2003; Wilson, Gallagher and MacKenzie, 2000).

It is easy to compare the effectiveness of these programs because rating levels of education can be measured objectively. These studies would suggest that there is a correlation between recidivism and educational opportunities.

Job training has had mixed results on its overall effectiveness. Wilson, Gallagher and MacKenzie's meta-analysis concluded that there was minimal effectiveness in job training programs (2000). The "Washington State Institute for Public Policy" would conclude that there was a statistical significance in reduction of recidivism when individuals received job training (Aos, Phipps, Barnoski and Lieb, 2001). It is difficult to compare the effectiveness of these programs because rating these programs is very subjective. However, involvement in job training and education programs appear to have the greatest affects on reducing recidivism.

Rational Choice and Deterrence Theory

As previously discussed, rational choice and deterrence theory are the most predominant theories used by political figures to analyze crime and recidivism. The theories suggest that "behavior is the product of a rational assessment of costs and benefits... increase in the costs of crime should logically reduce the volume of crime." If an individual believes that there is a higher probability that they will get caught for their deviant behavior, they are more likely to receive disciplinary action and there will be minimal delays in disciplinary action, the individual is less likely to offend (Liska and Messner, 1999). This theory has dominated the political spectrum of our criminal justice system for over 40 years. The thought that crime is a rational choice removes the function of effectiveness of rehabilitation.

Scholars that argue for rational choice often believe that the correlation between job placement and lack of recidivism is a spurious argument. Marilyn C. Moses would argue that securing employment is not an indicator that the individual will not reoffend, but instead is an indicator of the individual's motivation to conform to social norms. She would use the example that measuring percentage of offenders that have married post release and do not reoffend does not provide scientific data that concludes match-making services reduce recidivism (Moses, 2012). These arguments support the notion that an individual will choose to either reoffend or conform to social norms post release, regardless of involvement in rehabilitation programs while still incarcerated.

Cumulative Disadvantage Theory

Cumulative disadvantage theory is a hybrid theory that combines classical labeling theory in conjunction with social control theory. The theory suggests "a dynamic conceptualization of social control over the life course, integrated with the one theoretical perspective in criminology that is inherently developmental in nature, labeling theory" (Sampson and Laub, 1997). The theory suggests that anti-social behavior experienced as a young child may perpetuate deviant behavior as an adult. Essentially life changing events may stigmatize an individual with a negative label, therefore weakening social bonds throughout the individual's life.

A study was conducted to test the applicability of cumulative disadvantage theory. Thomas G. Blomberg, William D. Bales and Alex R. Piquero tested this theory by measuring how effective was a positive life-changing event in juvenile delinquents in removing the negative stigma. Their study would investigate a cohort of juvenile delinquents that were released from Florida juvenile institutions between the fiscal year of 2000-2001. They tested to see if academic achievement while incarcerated would affect the probability of the individual returning to school. They also identified if there was a correlation with academic achievement and probability of reoffending within 12 months of being released. What they concluded was an increase in academic achievement while incarcerated would yield a higher probability of returning to school. Individuals that returned to school after being released had a significantly lower probability of being re-arrested within a year. Their findings suggest that academic achievement may be a life-changing event in a positive way that can remove a negative label and reinforce positive social bonds (Blomberg et al., 2011).

"The Inviting Convicts to College Program" (ICCP) was another study that measured the effectiveness of a life changing event and the ability to remove a negative label. The program would take undergraduate criminal justice students to a prison in Wisconsin and have them teach a non-accredited college course for inmates. Only about 44 percent of the students that enrolled in the program successfully completed and passed the class. These data were skewed because some prisoners were removed from the program for delinquent behavior, reassignment to another institution or removed for work detail. Out of the individuals that passed the program, 14 percent of them were enrolled in a university or technical college. However, a majority of the inmates that passed the program could not immediately enroll in a university because it would conflict with their mandatory release dates.

At the end of the program, the inmates were prompted to complete interviews and surveys about the program's effect on their self-image. What was discovered was that a majority of all of the inmates believed the program was a positive experience that provided them a hope for college, which was initially believed to be beyond their reach (Rose et al., 2010). The ICCP was a positive life-changing event in the majority of inmates that participated in the program. The program not only helped to remove the negative label of convict, but also helped to create stronger social bonds to education as well as the belief that these individuals could succeed in a conventional environment.

Anomie and Differential Association Theory

Robert Merton's adaption of anomie theory divided social norms into separate categories of social goals and means of obtaining those goals (Williams III and McShane, 2010). Merton would claim that there is an imbalance in the emphasis placed upon obtaining goals, however there is minimal emphasis placed on the means of achieving these goals. This imbalance creates an anomic culture in American society. Merton would establish five different adaptations of individuals. The conformist is the norm and all other adaptations are defined as deviant. The conformist accepts the means and goals of the culture. The innovator rejects the means yet adheres to the cultural goals. The ritualist rejects the cultural goals yet adheres to the means. The retreatist rejects both the means and the goals. The rebel rejects the current means and goals, however this individual tries to change the social norms (Liska and Messner, 1999).

Differential association theory suggests, "individuals learn criminal techniques and motives in association with others" (Liska and Messner, 1999). Deviant behavior therefore is an expression of definitions favorable to deviant learned behavior in association with others through intimate social relationships. Robert Burgess and Ronald Aker's adaption of differential association theory is defined as social learning theory, which is similar to operant conditioning. The theory suggests that deviant behavior is a learned process that is instilled by continuously rewarding deviant behavior (Liska and Messner, 1999).

As noted previously, inmates either participate or do not participate in rehabilitation programs due to a variety of reasons. The conformist in prison will participate in programs because they recognize that these programs are a conventional means to help them attain their goals upon release from prison.

Scholars have shown that although recidivism rates are lower in postsecondary education programs, this may not be because of the education itself but instead the motivating factors for attending the program (Jensen and Reed, 2006). Due to the time involved in participating in rehabilitation programs, conformists will often associate with other conformists. The conventional bonds established through associations will reaffirm and normalize conformist behavior among the group. This would suggest that the conformist is more likely to be motivated to not only participate in programs but also not reoffend.

The innovator may participate in the rehabilitation programs because it is viewed as good behavior for a parole board. These individuals are not concerned with the programs' effectiveness to help them be successful when they get out of prison. They are only focused on being released early (Seiter and Kadela, 2003). They will not establish conventional bonds with the conformist group because they do not respect the program or the behavior as beneficial for being successful upon release. They will often associate with other innovators because their motivation and behavior while participating in rehabilitation programs is rewarded through social attachments in this subculture. These individuals are more likely to reoffend.

The ritualist participates in rehabilitation programs only because they have to. These individuals are more likely to be enrolled in programs like drug rehabilitation or basic adult education programs because of a mandatory court order (Seiter and Kadela, 2003). They are not motivated to change their lives, therefore will not retain any of the information. They will often associate with other ritualists as well as retreatists and rebels. Their behavior is rewarded through social relationships of not conforming to the desired program. These individuals will often reuse and reoffend after they are released, because they do not benefit from rehabilitation.

The retreatist and the rebel do not participate in any of the programs in prison. They either choose not to participate in the programs or are not allowed to because of their history. By rejecting the programs that are designed to help them reintegrate back into society, they are rejecting the acceptable norms of society. These individuals are usually only concerned about doing their time. They are more likely to reoffend because they do not receive any benefits from the rehabilitation programs. They are also more likely to associate with other individuals that have the same views of prison.

These individuals are the prominent prison population and are often the reason for high rates of recidivism.

Data and Methods

As previously described, the task of studying recidivism, and effectively reducing it through the implementation of education or vocational programs, is a difficult undertaking. The primary challenges that scholars face in studying recidivism are developing a concrete definition of recidivism, finding stable populations to study, and comparing diverse programs with varying degrees of program attention. As a result of these challenges, scholars have struggled to clarify if educational programs are effective tools in preventing offenders from recidivating.

This section will focus on how the current study plans to explore critical pieces of literature that focus on measuring the usefulness of prison education programs. Since there is a great deal of research that has been carried out on this topic and its relation to recidivism rates, the most effective way of examining the subject will be by conducting a meta-analysis.

By performing a meta-analysis, the work will aim to isolate factors that contribute to recidivism and uncover what qualities of programs are most effective at reducing the likelihood of offenders reoffending. Also, by conducting a meta-analysis, this study will be able to develop a more clear and concise understanding of how effective programs are, especially in relation to the variables: age, gender, previous level of education and race.

Criteria

It is essential to explain that although the studies chosen for the meta-analysis have several similarities, they also differ in their main objectives, the time the studies were performed, the populations examined and the demographics they chose to focus on. Therefore, it is important to make clear what criteria were followed in selecting which studies to incorporate in the meta-analysis. The studies that are included in the meta-analysis: (1) examine educational programs implemented in correctional facilities for convicted persons; (2) report a post-release measure of recidivism (e.g. technical violation, re-arrest, or conviction); (3) include a comparison group of non-program participants or offenders who did not receive funding for participation in programs; (4) were published in the English language after 1980. Studies were not examined that focused solely on vocational work or life skills training.

Yet, studies were included that looked at juveniles in the criminal justice system and the use of education programs in those settings (Wilson et al., 2000).

Selection Process

Along with following the criteria previously described, another tool that was applied to help select studies were principles set out by the University of Maryland (Jensen & Reed, 2006). These guidelines are used to “determine the scientific rigor of research studies categorizing the methodology of a study in a one of 5 levels, with 5 being the most rigorous and 1 the least rigorous.” A level 5 study indicates the study used random assignment of all groups; these studies are most effective in the control of influential variables. Level 4 studies incorporate comparison groups, within or without programs, in which there are slight differences between the treatment groups. Level 3 studies involve comparisons between at least two groups, one with exposure to programs and one without.

Also, statistical analysis and study design should verify the two groups are reasonably similar. In level 2 studies, they are limited and struggle to rule out other explanations because of their study design, dissimilar comparison groups and lack of controls to account for differences. Finally, level 1 studies demonstrate some correlation between program and recidivism, however, there is no comparison group involved in these studies (Jensen & Reed, 2006).

A majority of the studies that have been selected for use are considered to be level 3 studies. They provide adequate comparison groups between those who have participated in programs and non-program participants. However, the treatment of two groups cannot be verified as to have only slight differences. It is believed that level 3 studies are sufficient because they provide the current study with the necessary comparisons to ensure that the data that are collected are valid, reliable, and effectively describe the relationship between education programs and recidivism. Also, it has become clear that level 5 studies are very difficult to find, especially while studying the subject of recidivism. In a majority of the research conducted on recidivism, random selection is almost impossible due to the limited amount of the individuals that qualify to participate in prison programs.

Selected Studies

The first study assessed was conducted by Anderson in 1981. Its primary objective was to determine the difference in effectiveness of vocational and education programs on parolee behavior. It involved comparison groups of those who received vocational training or participated in educational programs and parolees who did not receive either education or training while incarcerated. This study incorporates labeling theory and looks to explore how the label of being a program participant may influence the future success of parolees and reduces their likelihood of recidivating.

The next study examined, conducted by Adams, Bennet, Burton, Cuvelier, Flanagan, & Fritsch (1994) addressed the impact of education during incarceration on post-release rates of recidivism. However, one aspect of this study that was distinctive, was that it looked at how participation in education programs may influence behavior both during incarceration and once prisoners were released. This study incorporates the theories of anomie and differential association in that it examines how one's environment may influence success in educational programs.

Similar to the other studies that have been discussed, Bloomberg, Bales & Piquero (2011) explored the question "Is educational achievement a turning point for incarcerated delinquents across race and sex?" They were interested to know if educational achievement helped to prevent juvenile offenders from committing future offenses. This study incorporates several theories, including the cumulative disadvantage theory that combines both labeling theory and social control theory. It takes into consideration how "labels exclude individuals from opportunities in education, employment and in social settings" (2011:203). The lack of opportunities thus leads to weak social bonding that contributes to childhood delinquency and later adult crime. It also incorporates labeling theory in relation to gender, race and delinquency. This suggests that the manner in which gender roles are internally defined impacts how society reacts to the behavior of males and females. Similarly, the "minority problems" suggest that the actions of minorities are interpreted differently, or are somehow deemed more dangerous, compared to white offenders (2011:204).

The final study by Nally, Lockwood, Knutson, and Ho (2012) took a different approach to examining education programs. The main objective of their study was to measure the effects of educational programs on not only recidivism rates, but also post-release employment rates.

A unique aspect of this study compared to others measuring the effectiveness of education programs in prison, is that this study includes a comparison group along with a study group.

Although these studies are unique from one another, this current study, through a meta-analysis and its collaboration with theories, hopes to answer the question "Are educational programs effective in reducing recidivism rates?" Also, how it is that age, gender, one's educational history and/or race influence one's success once released from incarceration will be factored in. The overall sample size examined through this meta-analysis consisted of 21,113 offenders.

Conclusion

Findings

The Relationship Between Correctional Education and Parole Success by Dennis Anderson (1981) would be considered a level three study. Anderson's methodology and data collection sections describe the data collected from the Illinois Correctional Center during the years of 1972 through 1976. The sample included 400 randomly selected former Vienna Correctional Center inmates. His data only considered male inmates. Out of the 400 selected individuals, 162 had no information on training received and no parole information. Of the remaining 238, 122 had received some type of vocational training while incarcerated. There were 70 individuals that had received either their General Equivalency Degree and/or college courses. Education and vocational groups were not discrete.

The study's objective was to determine the impact of rehabilitation programs on post release or parole success rates. To measure and compare the effectiveness of these programs, Anderson developed fourteen measurable objectives. For the purposes of this meta-analysis, only objectives that measured the effectiveness of education programs and parole violations will be considered. Out of the fourteen objectives that were considered in Anderson's study, only five of those objectives specifically reflect the effectiveness of education programs and parole violations.

The first objective applicable to this study was objective 2: To determine if a relationship exists between number of arrests on parole and parolees having or not having vocational training. A Chi-square test indicated that there was a significant relationship beyond a .01 level of confidence that parolees who received training had fewer arrests.

The second objective that was applicable to this study was objective 3: To determine if there is a relationship between the level of vocational training completed and violation of parole. For those individuals that received no training or minimal training, 51 out of 140 (36.4%) were returned for a parole violation. For those that completed training and received a certificate of training, only 20 out of 98 (20.4%) were returned for a parole violation. This suggests that there is a relationship between level of training completed and probability of the individual violating their parole.

The third objective that was applicable was objective 10: To assess the relationship between enrolling or not enrolling in academic course work and violation of parole. This objective revealed no significant relationship between enrolling in academic course work and parole violation.

The next objective that was applicable was objective 11: To assess the relationship between enrolling or not enrolling in academic course work and the number of months employed while on parole. This objective also determined that there was no significant relationship between enrolling in academic course work and months employed while on parole.

The final objective that was applicable to this study was objective 12: To determine the relationship between institutional academic training and academic or vocational training taken while on parole. This relationship was significant at the .001 level of confidence. Individuals that participated in education programs while incarcerated were more likely to continue their education or vocational training while on parole.

Objectives 2, 3 and 12 suggest that the success on parole is correlated to the amount of training received. This would highlight control theory and labeling theory. Individuals believe that the training programs are a means for success on parole.

The more involved an individual was with rehabilitation programs, the more likely they were to succeed while on parole by continuing to conform to the social norms learned while incarcerated. This would also suggest that the completion of the program provides the individual with a certificate that labels them a success prior to being released onto parole. Objective 10 and 11 would indicate that just attempting education programs is not enough to reduce parole violations. This could also label the individual negatively as a failure to complete the program in a controlled environment.

A Large-scale Multidimensional Test of the Effect of Prison Education Programs on Offenders' by Adams, Bennett, Burton, Cuvelier, Flanagan and Fritsch (1994) would be considered a level three study. The sample for this study consisted of 14,411 inmates who were admitted and released from the Texas Department of Criminal Justice-Institutional Division (TDCJ-ID) between March of 1991 through December 1992.

Released parole violators were not considered in the sample. The individuals involved in this study had been released on parole, were under mandatory supervision, and/or within expiration of sentence.

This study provided several advantages for measuring effectiveness of education programs. First, it is a large sample and provides researchers a clear understanding of those who participated in the Windham school programs and those who did not. Also, those involved in the study have completed their sentences; therefore access was available to their behavior and academic history while incarcerated.

An important aspect of the study focused on the extent of time spent in prison, in the programs and the follow-up period after release. Although the follow-up period varied for each prisoner, an examination of distribution period concluded that for both groups this was identical. The average follow-up period for Windham participants was about 24 months, and it was 25 months for non-program participants. Non-program participants served an average of 4.5 months in prison, while those in vocational programs served about 6.7 months in prison. In educational programs, they served an average of 5.6 months and those in both programs served 7.6 months.

The key findings are significant and provide a great deal of insight into the effectiveness of programs in terms of how long participation in the program lasts and how long one is incarcerated.

First, researchers saw that "the percentage of inmates who returned to prison did not vary across program participants and non-program participants" (1994:437). Participation in academic and vocational programs showed exposure effects, in which recidivism rates did not begin to decline until about 200 hours of participation was completed. Researchers concluded that those with "lower educational levels and those who receive less than 200 hours of participation in academic programs are more likely to recidivate" (1994:439). In order for academic programs to be effective in reducing recidivism, significant participation in the programs is essential. Finally, the data show that "inmates at the lowest levels of educational achievement benefit most (as indicated by lower recidivism rates) from participation in academic programs" (1994:440). Individuals that begin the program with the lowest levels education benefited the most from exposure to the program.

This study indicates that there is a correlation with time involved in education programs and effectiveness at reducing recidivism. Due to the fact that recidivism rates did not decline until an individual had spent over 200 hours involved in the program highlights levels of commitment and involvement in the program. The extensive time involved for individuals would also highlight that the inmate is conforming to the socially accepted means to achieve their goals, which is identified in Merton's anomie theory. However, the data could possibly have been skewed by the inmate's time in prison. The average time in prison is considerably shorter for non-participants, which could have affected their ability to participate in the programs.

Is Educational Achievement a Turning Point for Incarcerated Delinquents Across Race and Sex? by Bloomberg, Bales & Piquero (2011) was also a level three study. They wanted to determine if educational achievement helped to prevent juvenile offenders from committing future offenses. The study consisted of 4,147 youths released from 115 juvenile justice institutions in the years of 2000-2001 in Florida. The data about the cohort were collected from 2 sources, the Florida Department of Education (DOE) and the Florida Department of Law Enforcement (FDLE). Data from the DOE provided information about the youths' released residential commitment programs, measured student school performance, school participation, as well as demographic information. This information was then matched with information collected from the FDLE. For the purpose of the study, the data sources used information from the year of release (2000-2001) and one year post-release (2001-2002).

Bloomberg et al.(2011) examined 2 key variables to measure post-release outcomes. The variables were percentage of youth returning to school and the percentage of youth rearrested in a one-year period. Academic achievement was measured by calculating the number of academic credits earned while incarcerated weighted by the proportion of academic credits in relation to the total school credits earned. Also, it was essential in the study to control for both gender and race because past literature has demonstrated that "mean differences across race/sex in education achievement should translate into differential recidivism rates across groups" (2011:208).

Through propensity score analysis, three significant findings were uncovered. First, youth with above average academic achievement while incarcerated were more likely to return to school post-release. Secondly, those with above average school attendance were less likely to be re-arrested in the year following release. Finally, results concluded that although there were "pronounced gains" for African-American males, the effectiveness of school attendance was consistent across both race and sex, indicating education is a large preventative measure against recidivism.

These findings support the cumulative disadvantage theory in which a positive event in a person's life can overshadow or serve as a turning point away from crime. The juveniles that experienced success in academics while incarcerated were more likely to continue that success in school and not recidivate. This would suggest that the academic success experienced while incarcerated served as that positive life-changing event. This event provides a positive self-image or label that helps the individual to continue their success and not recidivate.

The final study, *An Evaluation of the Effect of Correctional Education Programs on Post Release Recidivism and Employment: An Empirical Study in Indiana* by Nally, Lockwood, Knutson, and Ho (2012) was also a level three study. The main objective of their study was to measure the effects of educational programs on not only recidivism rates but also on post-release employment rates. A unique aspect of this study compared to others measuring the effectiveness of education programs in prison is that this study includes a comparison group along with a study group. The data for this study were derived from the Education Division of the Indiana Department of Correction in collaboration with IDOC Research and Planning Division.

They update datasets on released offenders, including details about their post-release recidivism, employment and demographic information. Since 2008, IDOC Education Division has worked alongside with the Indiana Department of Workforce to systematically document the employment history of 6,561 offenders who were released from prison in 2005.

The study group that was established consisted of 1,077 Indiana offenders who received federal funding for education from 2002-2009 and who were released during that time. Then, from the 6,561 offenders, 1,078 offenders were selected for the comparison group, none of which had received federal funding for education.

The most significant characteristic of the comparison group was that they were randomly selected after meeting the criterion for sample size, race, and education level.

In terms of demographics, the study group consisted of 156 females and 921 males; 688 Caucasian, 349 African American offenders, 32 Hispanics, 3 Pacific Islanders, and 5 unidentified; 783 offenders were of the age of 20-29 years old, 287 offenders from the age of 30-39 years old, 4 between the ages of 40-49, and 3 offenders 50 years or older. Whereas the comparison sample consisted of 167 females and 911 males; 712 Caucasians, 366 African-Americans; 184 offenders were between the age range of 20-29 years old, 403 between the age of 30-39, 324 between the age of 40-49 years old and 167 of the offenders 50 years of age or older.

Through the examination of outcome measures between the two groups, the relationship between education and employment and recidivism were addressed. The study concluded that offenders who did not attend correctional programs are about 3.7 times more likely to be repeat offenders. However, the results did not find a relationship between employment and post-release recidivism amongst released offenders. In relation to demographics, the results of the study demonstrate a significant correlation between age and recidivism. Older offenders were more likely to recidivate than younger offenders.

The correlation between age of the offender and probability of recidivism supports differential association theory and control theory. Older offenders are often set in their beliefs and have limited social attachments. They usually do not have as much to lose because of their negative trajectories and lack of positive transitions.

The younger offenders however benefit from the programs because the positive transitions in their life help them to learn noncriminal behavior just as they learned deviant behavior.

Discussion

As the findings of this meta-analysis have suggested, there are multiple factors to acknowledge when considering if educational programs are effective in reducing recidivism rates. The overall data suggest that education programs are in fact effective.

The variance in overall effectiveness can be attributed to differences in age, race, gender and educational commitment.

The most prominent indicator in effectiveness of education programs was age of offender. Bloomberg et al. (2011) and Nally et al. (2012) both suggested that age is a primary factor when considering effectiveness of education programs on recidivism. Bloomberg et al. (2011) found that juveniles benefited tremendously from education programs. The more successful the juvenile was with the academic program, the less likely they were to recidivate. Nally et al. (2012) provided data that suggest older offenders do not benefit as much from education programs.

Labeling theory can help to explain why education programs were more effective for younger offenders. Lemert's adaptation of the labeling theory would suggest that affects of primary deviance increase the probability of secondary deviance (Liska and Messner, 1999). The older offenders have established deviance as a self-concept and a social status. Cumulative disadvantage theory would indicate that the younger offenders benefit more from completing education programs because this experience provides a transition in their lives to remove them from their deviant trajectory (Sampson and Laub, 1997). Burgess and Akers' adaptation of differential association would also add that since deviance is a learned behavior through operant conditioning, the older offenders may have already learned the deviant life, however a newly learned behavior may be more accepted by a younger population (Liska and Messner, 1999).

Bloomberg et al. (2011) identified that there was some difference in recidivism rates when considering gender and race.

This study provided that both males and females that were successful in academic programs while incarcerated were likely to return to school. In males, the difference was 13% and significant and in females, the difference was 11.4% and not significant. The data also indicated that both white and black juveniles that were successful in academic programs were likely to return to school. In whites, the difference was 6% and not significant and in blacks, the difference was 12.5% and significant. When considering gender and race, "the largest difference and the highest percentage of returning to school post-release was observed in black males" (2011:210), which was 15.1% and significant. This study suggests that gender and race are contributing factors when considering effectiveness of education programs.

The reasoning why there was a large change in the black male population may be answered through a combination of labeling theory, control theory and anomie theory. As Barlow and Barlow have indicated, the young black male is perceived as the biggest threat to the social order because he has the least to lose (1999). By gaining some educational experience, the young black male is conforming to the social means of achieving success. Through this success, they remove the negative label that they have the nothing to lose. An increase in education indicates an increase in what it means to have an education, the commitment it takes to earn the education and the time involved in gaining this education (Liska and Messner, 1999).

Educational commitment was identified in Adams et al. (1994) and Anderson (1981). Adams et al. (1994) identified a relationship between level of education and effectiveness of education programs. The study identified that individuals with lower levels of education benefited the most from these programs and that these effects were noticeable through the 12th grade. This study would also identify that differences in recidivism rates were only noticeable if the individual participated in 200 hours or more in the program. Anderson's study would highlight that individuals who participated and completed programs while incarcerated were more likely to continue in education programs on parole.

The correlation of commitment to success and reduction in recidivism can be explained through social control theory and anomie theory. The Anderson (1981) study points out, those who complete a program are the ones that benefit from the program. This highlights the commitment involved to complete the program, which indicates conforming to social norms of what it means to be successful. This also indicates latent effects of what it actually means to complete a program.

Adams et al. (1994) indicate that the overall commitment to the program did not show a reduction in recidivism until at least 200 hours were met. This shows that there was a certain level of commitment to the goals of the education programs necessary for a successful outcome.

Merton's anomie theory would suggest that individuals who did not participate in 200 hours or more probably were either ritualists or innovators. The ritualist would have been in the program only because they have to be, usually because of minimal educational experience prior to being incarcerated.

They participate, but are not involved and are more concerned about being released than gaining experience from the program. The innovator is involved in the program because they are only focused on being released early (Seiter and Kadela, 2003). If they do better in the education programs, they may reduce their time incarcerated. Adams et al. (1994) indicated that one issue with individuals not being successful post release was because they were released before they were exposed to enough time in the program.

Future Research Considerations

The primary issue with measuring recidivism is an inconclusive definition of what recidivism means. Future research should conceptualize the definition and exact timeline of recidivism. This would remove discrepancies among scholars and allow for data comparisons.

Future research should reflect the effectiveness of different levels of education. There is minimal research on comparing General Education Development programs as more or less effective than college level courses. Also there is minimal research comparing the effectiveness of vocational training and education programs. Finally, there are minimal studies that consider the effectiveness of combining vocational training and education. Future research should strive to identify what programs are more effective than others.

Future research should document demographic characteristics of individuals involved in the study. Separating age into smaller cohorts would help identify recidivism rates as age increases. Another demographic consideration would be to collect the information of the individual's level of education prior to the study.

By identifying these variables, future research would be able to better predict the overall effectiveness of education programs on recidivism.

Policy Suggestions

As previously described, the "Tough on Crime" political movement has significantly cut funding for rehabilitative and educational programs.

However, the findings of the current meta-analyses suggest an increase in funding for preventative programs and other programs during incarceration that will benefit society by reducing the amount of money spent on incarceration and by decreasing recidivism rates. Future political policies should take into consideration the long-term effects of reducing recidivism rates when considering overall court and prison costs.

One of the key findings of the study is that education programs are effective at preventing recidivism. Therefore, it would be beneficial to increase federal and state funding for General Education Development programs and college level courses in prisons. This will not only standardize education programs, but will provide quantitative data to measure how successful the programs are. Through participation in the programs, one can remove the negative stigma of being a criminal and one may be further driven by their success to reject their life of crime.

Another useful policy change would entail requiring prisons to develop a uniform system of measuring and reporting recidivism rates. Implementing a system that accurately records recidivism rates would increase the prison system's ability to improve upon and develop effective rehabilitating programs. This would benefit future research and make it easier to compare data.

An additional finding from the current study was that age matters. Not only are older offenders more likely to reoffend than younger offenders, but also juveniles benefit considerably from participation in education programs. It has also been shown that academic success is a good preventative measure toward reoffending. These findings lead to several policy suggestions including the development of preventative programs, funding for detention alternative programs and funding for education programs during incarceration.

Preventative programs refer to educational programs that are implemented in communities, primarily those with high at-risk youth populations.

These educational programs would educate at-risk youth not only on the importance of education, but also would provide them with knowledge about substance abuse, peer pressure, consequences of truancy and running away, and penalties connected with violating the law.

These programs will help to reduce the juvenile incarceration rates; thus reducing the opportunities to develop negative associations that may lead to more crime.

Detention alternative programs are programs that would help to reduce the negative label associated with being a juvenile delinquent. Instead of incarcerating juveniles, detention alternative programs would provide individuals a chance to use the time spent in lock-up, in a more productive manner. This could be seen through educating juveniles about the wrongfulness of their actions and providing opportunities for them to give back to their communities through the means of community service.

Although there are several policy changes that can be made in order to reduce recidivism rates, there are also several limitations that hinder the development of these programs. As stated earlier, funding for prison programs, especially funds allocated for rehabilitative programs, has been significantly cut in the past decades. Yet, if recidivism rates are not reduced soon, the cost of incarceration will increase dramatically. Therefore, it is more cost efficient to invest in programs to reduce recidivism rates rather than pay to incarcerate offenders for an indefinite amount of time.

References

- Aos S., P. Phipps, R. Barnoski and R. Lieb, 2001. The comparative costs and benefits of programs to reduce crime. Washington State Institute For Public Policy, Version 4.0.
- Adams, K., K. Bennett, V. Burton Jr., S. Cuvelier, T. Flanagan and E. Fritsch, 1994. A large-scale multidimensional test of the effect of prison education programs on offenders' behavior. *Prison Journal* 74(December):433-441.
- Anderson, D., 1981. The relationship between correctional education and parole success. *Journal of Offender Counseling, Services & Rehabilitation* 5(3):13-25.
- Barlow, D. and M. Barlow, 1999. A political economy of community policing. *An International Journal of Police Strategies & Management* 22(4):646-671.
- Bloomberg, T., W. Bales and A. Piquero, 2011. Is education achievement a turning point for incarcerated delinquents across race and sex? *J Youth Adolescence* 41(1):202-216.
- Jensen, E. and G. Reed, 2006. Adult correctional education programs: an update on current status based on recent studies. *Journal of Offender Rehabilitation* 44(1):88-91.
- Lahm, K., 2009. Educational participation and inmate misconduct. *Journal of Offender Rehabilitation* 48(1):37-52.
- Liska, A. and S. Messner, 1999. *Perspectives on crime and deviance*. Prentice-Hall..
- Maltz, M., 1984. *Recidivism*. Academic press.

- Martin, G., 2003. The effectiveness of community-based sanctions in reducing recidivism. *Corrections Today* 65(1):26-29.
- May, D. and T. Brown, 2011. Examining the effect of correctional programming on perceptions of likelihood of recidivism among incarcerated prisoners. *Journal of Social Science Research* 37(1):353-364.
- Moses, M., 2012. Ex-offender job placement programs do not reduce recidivism. *Corrections Today* (August/September):106-108.
- Nally, J., S. Lockwood, K. Knutson and T. Ho, 2012. An evaluation of the effect of correctional education programs on post-release recidivism and employment: an empirical study in Indiana. *The Journal of Correctional Education* 63(1):69-88.
- Phelps, M., 2011. Rehabilitation in the punitive era: the gap between rhetoric and reality in U.S. prison programs. *Law & Society Review* 43(1):33-68.
- Rhodes, W., 2010. Estimating treatment effects and predicting recidivism for community supervision using survival analysis with instrumental variables. *J Quant Criminol* 26(1):391-413.
- Rose, C., K. Reschenberg and S. Richards, 2010. The inviting convicts to college program. *Journal of Offender Rehabilitation* 49(1):293-308.
- Sampson, R. and J. Laub, 1997. A life-course theory of cumulative disadvantage and the stability of delinquency." Pp. 133-136 in Terrence P. Thornberry (Eds) *Developmental Theories of Crime and Delinquency, Advances in Criminological Theory*. Transaction.
- Sedgley, N., C. Scott, N. Williams, and F. Derrick, 2008. Prison's dilemma: do education and jobs programmes (sic) affect recidivism?" *Economica* 77(1):497-517.
- Seiter, R. and K. Kadela, 2003. Prisoner reentry: what works, what does not, and what is promising. *Crime & Delinquency* 49(30):360-388.
- Spohn, C. and D. Holleran, 2002. The effect of imprisonment on recidivism rates of felony offenders: a focus on drug offenders. *Criminology* 40(2):329-357.
- Traub, S. and C. Little, 1999. *Theories of deviance*. Peacock Publishers.
- Williams III, F. and M. McShane, 2010. *Criminological Theory*. Prentice-Hall.
- Wilson, D., C. Gallagher and D. MacKenzie, 2000. A meta-analysis of corrections-based education, vocation, and work programs for adult offenders. *Journal of Research in Crime and Delinquency* 37(4):347-368.
- Yamatani, H. and S. Spjeldnes, 2011. Saving our criminal justice system: the efficacy of a collaborative social service. *Social Work* 56(1):53-61.
- Zhang, S., R. Roberts and V. Callanan, 2006. Preventing parolees from returning to prison through community-based reintegration. *Crime & Delinquency* 52(4):551-571.