

# The Post-Release Employment and Recidivism Among Different Types of Offenders With A Different Level of Education: A 5-Year Follow-Up Study in Indiana

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## **Abstract**

*Today, education programs in adult correctional facilities have encountered tremendous challenges due to the reduction and/or elimination of state and federal funding to support them. Yet, previous research consistently demonstrates that released offenders are more likely to be “unemployed” after release from prison due to their inadequate education and job skills (Vacca, 2004). The present researchers have conducted a 5-year (2005-2009) follow-up study to explore the impact of an offender’s education and post-release employment on recidivism among different types of offenders (i.e., violent, non-violent, sex, and drug offenders). This 5-year follow-up study of a cohort of 6,561 offenders represented 43.2 percent of a total of 15,184 offenders who were released from the Indiana Department of Correction (IDOC) custody throughout 2005. Results from this longitudinal study revealed that recidivist offenders were likely to be unemployed or under-educated. Furthermore, this study’s results showed that the employment status, age of the offender, and the offender’s level of formal education are the most important predictors of recidivism among released offenders, regardless of their type of offense. Most importantly, the offender’s level of formal education is an important element for reentry because it has a simultaneous effect on both post-release employment and recidivism.*

## **About the authors**

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# **The Post-Release Employment and Recidivism Among Different Types of Offenders With A Different Level of Education: A 5-Year Follow-Up Study in Indiana**

## **Introduction**

Incarcerated offenders have been frequently portrayed as economically poor, educationally illiterate, disproportionately unemployed (before and after release from prison), and frequently re-incarcerated (after release from prison). There are many different plausible contributing factors that might explain why released offenders could not successfully reenter the community. A consistent finding is that uneducated offenders were likely to become recidivist offenders (Allen 1988; Batiuk 1997; Blomberg, Bales, and Piquero 2012; Burke and Vivian 2001; Fabelo 2002; Harlow 2003; Nuttall, Hollmen, and Staley 2003; Vacca 2004; Wilson, Gallagher, and MacKenzie 2000). Specifically, there is a need for enhancing an offender's level of formal education in order to reduce the post-release recidivism rate. In fact, Linton (2011) indicates that: "If the current trend of reduced investment of public funds in post-secondary education behind bars persists, are there other opportunities to build post-secondary opportunities for offender populations?" (p. 73). Linton (2011) also suggests utilizing the "Internet based/open source" and "community based" educational resources to boost post-secondary education opportunities for incarcerated offenders and to enhance the chance to reentry into community successfully.

Nonetheless, administrators, at the state level, who are responsible for implementing education programs at correctional facilities have encountered an array of challenges to maximize limited funding to meet with the ever-increasing demand from a significantly high number of educationally-deficient incarcerated offenders. Correctional education program administrators have to carefully select and adequately allocate funding to those offenders who

will most likely to be academically successful and who possess a low risk for being a recidivist offender after release from prison. In order to understand the importance of offender's education on reentry, this 5-year longitudinal study has provided detailed analyses on post-release employment and recidivism among different types of offenders (i.e., violent, non-violent, sex, and drug offenders). Furthermore, the effect of the offender's level of formal education at the time of release from incarceration on post-release recidivism and employment has been carefully examined in this study.

### **Exploring Post-Release Recidivism**

The post-release recidivism is a generally-recognized yardstick to measure the success of an offender's reentry to the community. However, it is important to mention that there are some discrepancies in measuring post-release recidivism among released offenders while considering the nature of the crime(s) the offender committed. Criminal justice practitioners, such as probation officers, frequently consider the nature of the crime an offender committed as a risk factor to predict recidivism. Quite often, the media and the general public tend to believe that sex offenders would be likely to re-offend upon release from prison. Undoubtedly, there is a distinctive difference between sex offenders and non-violent offenders in regard to the public's perceptions on released offenders and criminal justice reaction to the crimes that offenders had committed.

Previous studies revealed that post-release recidivism rates were different among different types of criminal offenders. For example, results of reentry studies (Hughes and Wilson 2004; Langan and Levin 2002) revealed that the recidivism rate was 61.7 percent for violent offenders, 73.8 percent for property offenders, 66.7 percent for drug offenders, and 62.2 percent for public-order offenders. Meanwhile, there were several noteworthy studies on the

post-release recidivism rate of a specific offender group. Roman, Townsend, and Bhati (2003) found the recidivism rate for drug court graduates (i.e., drug offenders) within 1 year of graduation was 16.4 percent, but the recidivism rate was escalated to 27.5 percent within 2 years after graduation. A study of the post-release recidivism rate among sex offenders (Langan, Schmit, and Durose 2003) revealed that 43.0 percent of 9,691 sex offenders were re-incarcerated within 3 years after release from prison. Durose and Mumola (2004) examined the recidivism rate among 210,886 nonviolent offenders and found that almost 70 percent of the offenders were rearrested within 3 years after the initial release from prison, nearly 50 percent of nonviolent offenders were reconvicted, and more than 25 percent of nonviolent offenders were returned to prison.

A notable number of studies examined the contributing factors to recidivism among released offenders. The most plausible reasons to explain the relatively high recidivism rate among released offenders were centered on the offenders' educational illiteracy, lack of vocational job skills, lack of interpersonal skills, or criminal history (Rossman and Roman 2003; Vacca 2004). Particularly, a consistent finding from previous studies showed that released offenders were likely to be "unemployed" after release from prison due to their inadequate education and job skills (Aos, Miller, and Drake 2006; Batiuk 1997; Chappell 2002; Erisman and Contardo 2005; Harlow 2003; Steurer and Smith 2003; Vacca 2004; Winterfield, Coggeshall, Burke-Storer, Correa, and Tidd 2009). Previous studies' results showed that "unemployed" offenders were likely to be re-incarcerated after release from prison.

Previous studies (Finn 1998; Harrison and Schehr 2004; Solomom, Visher, La Vigne, and Osbourne 2006; Visher, Debus, and Yahner 2008; Uggen 2000; Uggen and Staff 2001) had clearly indicated that the post-release employment had exerted an important preventive

mechanism to prevent released offenders from becoming involved in criminal activities. Furthermore, La Vigne, et al. (2008) stated that the post-release employment was the most important predictor of recidivism and the success of an offender's reentry into the community. Nonetheless, released offenders frequently encountered numerous challenges and obstacles, such as, criminal background check, while seeking for a job upon release from prison (Holzer, Raphael, and Stoll 2004; Pettit and Lyons 2007; Travis 2005). Additionally, previous researchers (Fashey, Roberts, and Engel 2006; Hollin and Palmer 2009; Rossman and Roman 2003; Vacca 2004) also indicated that released offenders could not find an adequate job because of their deficiency in education and job-related skill.

Steurer et al. (2001) conducted a comprehensive study to assess the impact of correctional education on recidivism and post-release employment, along with other behavioral measures among released offenders. This longitudinal study indicated that correctional education would reduce long-term recidivism among released offenders, but showed no significant impact on post-release employment. A recent study (Nally, Lockwood, and Ho 2011) revealed that the unemployment rate reached 65.5 percent among released offenders during the recession years (2008-2009). In order to further understand the interrelationship of offender's education, the post-release employment and recidivism, the present researchers have conducted a 5-year (2005-2009) follow-up study to explore the impact of education on post-release employment and recidivism among different types of offenders (i.e., violent, non-violent, sex, and drug offenders).

## **Methodology**

### ***Data Description***

This 5-year (2005-2009) follow-up study contained 6,561 offenders, which represented 43.2 percent of a total of 15,184 offenders who were released from the Indiana Department of Correction (IDOC) custody throughout 2005. This dataset was a product of three (3) primary data sources: (1) IDOC Division of Research and Planning, (2) IDOC Education Division, and (3) Indiana Department of Workforce Development (DWD). The IDOC Division of Research and Planning provided up-to-date information in regard to the offenders' demographical characteristics, legal records, and other relevant information, such as the release date and the return date--for identifying the offender's recidivism status. The IDOC Education Division provided information regarding the incarcerated offenders' educational information such as the level of education prior to release from IDOC custody. The Indiana Department of Workforce Development (IDWD) provided post-release employment information, such as job title or quarterly income, if employed, among 6,561 released offenders. In short, the dataset contained several crucial factors for analyzing the contributing factors to the post-release employment and recidivism among different types of offenders, which included: (1) offender's demographics (i.e., race, gender, and age), (2) offender's education, (3) employment-related information, (4) type of offender, and (5) recidivism.

### ***Outcome Measures***

The primary dependent measure in this study focused on identifying the contributing factors to post-release recidivism while controlling for the offender's education and the type of offender. There were four (4) types of offenders were classified in this study, which were based on the nature of the most serious offense that offenders had been convicted; they were: (1)

violent offender, (2) non-violent offender, (3) sex offender, and (4) drug offender. The offenders were counted as recidivist offenders if they were returned back to IDOC custody in the study period of 2005-2009. The present researchers found that major legal reasons for released offenders to be re-incarcerated were a parole violation, a probation violation, or committing a new criminal offense.

There were four different types of offenders among 6,561 Indiana offenders in this study; they were: (1) violent offenders (n=1,201), (2) non-violent offenders (n=3,469), (3) sex offenders (n=369), and (4) drug offenders (n=1,522). The recidivism rate was examined in each offender group, with different levels of education, in order to identify which offender group would be likely considered as high-risk on the basis of the recidivism measure. Additionally, while controlling for the offender's level of education, post-release employment in each offender group was examined to further understand the effect of education on employment and job attainment (i.e., duration of employment) among released offenders in the study period of 2005-2009.

### **Finding**

This 5-year follow-up study of 6,561 offenders who were released throughout 2005 revealed that 35.4 percent (n=2,321) of the released offenders had an education below high school, 52.8 percent (n=3,461) had a high school diploma or GED, 4.7 percent (n=306) had a college education, and 7.2 percent (n=473) had a level of formal education that was unknown. In order to effectively analyze the post-release employment and recidivism among different types of offenders with a different level of education, those offenders who had missing information regarding their level of education were excluded from analyses in this study. Therefore, the sample of this study contains 1,142 violent offenders, 3,163 non-violent offenders, 361 sex offenders, and 1,422 drug offenders.

**Table 1: Demographic Characteristics of Violent Offenders (n=1,142)**

Variable	Below HS (n=424)	High School (n=627)	College (n=91)
<b>Offender Ethnicity</b>			
African American	272 (64.2%)	349 (55.7%)	52 (57.1%)
Caucasian	131 (30.9%)	266 (42.4%)	35 (38.5%)
Hispanic	18 (4.2%)	11 (1.8%)	3 (3.3%)
Asian	2 (0.5%)	1 (0.2%)	1 (1.1%)
Unknown	1 (0.2%)	0 (0.0%)	0 (0.0%)
<b>Offender Gender</b>			
female	31 (7.3%)	30 (4.8%)	13 (14.3%)
male	393 (92.7%)	597 (95.2%)	78 (85.7%)
<b>Offender Age</b>			
under 20 years	19 (4.5%)	16 (2.6%)	0 (0.0%)
20-29 years	151 (35.6%)	212 (33.8%)	18 (19.8%)
30-39 years	121 (28.5%)	193 (30.8%)	35 (38.5%)
40-49 years	100 (23.6%)	163 (26.0%)	22 (24.2%)
50-59 years	26 (6.1%)	39 (6.2%)	16 (17.6%)
60 years or above	7 (1.7%)	4 (0.6%)	0 (0.0%)
<b>Employment Status</b>			
unemployed	187 (44.1%)	209 (33.3%)	28 (30.8%)
employed	237 (55.9%)	418 (66.7%)	63 (69.2%)
<b>Recidivism Status</b>			
Non-recidivist	185 (43.6%)	355 (56.6%)	67 (73.6%)
recidivist	239 (56.4%)	272 (43.4%)	24 (26.4%)

Note: “Below HS” represents offenders have an education below high school, “High School” for high school diploma or GED, and “College” for the completion of a 2-year college degree.

Table 1 illustrates demographic characteristics of 1,142 violent offenders. Among 1,142 violent offenders, there were 424 offenders had an education below high school, 627 offenders had a high school diploma or GED, and 91 offenders had completed a 2-year college education. In regard to 424 violent offenders who had an education below high school, results of this study revealed that 64.2 percent (n=272) were African American, 30.9 percent (n=131) were Caucasian, 4.2 percent (n=18) were Hispanic, 0.5 percent (n=2) were Asian, and 0.2 percent

(n=1) whose race was unknown. Meanwhile, 92.7 percent (n=393) of violent offenders who had an education below high school were male. A vast majority of offenders who had an education below high school were in the age range of 20-49 years old. The post-release employment rate was 55.9 percent among violent offenders who had an education below high school. (Note: An offender who had been employed at least one quarter after release was regarded as an “employed” offender in this study.) The recidivism rate was 56.4 percent among violent offenders who had an education below high school.

Among 627 violent offenders who had a high school diploma or GED, results of this study revealed that 55.7 percent (n=349) were African American, 42.4 percent (n=266) were Caucasian, 1.8 percent (n=11) were Hispanic, and 0.2 percent (n=1) were Asian. Meanwhile, 95.2 percent (597) of violent offenders who had a high school diploma or GED were male. A vast majority of offenders who had a high school diploma or GED were in the age range of 20-49 years old. The post-release employment rate was 66.7 percent among violent offenders who had a high school diploma or GED. The recidivism rate among violent offenders who had a high school diploma or GED was 43.4 percent.

Among 91 violent offenders who had a 2-year college education, results of this study revealed that 57.1 percent (n=52) were African American, 38.5 percent (n=35) were Caucasian, 3.3 percent (n=3) were Hispanic, and 1.1 percent (n=1) were Asian. Meanwhile, 85.7 percent (n=78) of the violent offenders who had a 2-year college education were male. A vast majority of offenders who had a 2-year college education were in the age range of 20-49 years old. The post-release employment rate was 69.2 percent among violent offenders who had a 2-year college education. The recidivism rate among violent offenders who had a 2-year college degree was 26.4 percent.

**Table 2: Demographic Characteristics of Nonviolent Offenders (n=3,163)**

Variable	Below HS (n=1,161)	High School (n=1,856)	College (n=146)
<b>Offender Ethnicity</b>			
African American	689 (59.3%)	955 (51.5%)	69 (47.3%)
Caucasian	439 (37.8%)	861 (46.4%)	75 (51.4%)
Hispanic	31 (2.7%)	31 (1.7%)	1 (0.7%)
Asian	1 (0.1%)	8 (0.4%)	1 (0.7%)
Unknown	1 (0.1%)	1 (0.1%)	0 (0.0%)
<b>Offender Gender</b>			
female	200 (17.2%)	249 (13.4%)	28 (19.2%)
male	961 (82.8%)	1607 (86.6%)	118 (80.8%)
<b>Offender Age</b>			
under 20 years	36 (3.1%)	12 (0.6%)	0 (0.0%)
20-29 years	469 (40.4%)	561 (30.2%)	25 (17.1%)
30-39 years	350 (30.1%)	626 (33.7%)	50 (34.2%)
40-49 years	255 (22.0%)	509 (27.4%)	51 (34.9%)
50-59 years	39 (3.4%)	132 (7.1%)	16 (11.0%)
60 years or above	12 (1.0%)	16 (0.9%)	4 (2.7%)
<b>Employment Status</b>			
unemployed	491 (42.3%)	645 (34.8%)	52 (35.6%)
employed	670 (57.7%)	1211 (65.2%)	94 (64.4%)
<b>Recidivism Status</b>			
Non-recidivist	501 (43.2%)	974 (52.5%)	98 (67.1%)
recidivist	660 (56.8%)	882 (47.5%)	48 (32.9%)

Note: “Below HS” represents offenders have an education below high school, “High School” for high school diploma or GED, and “College” for the completion of a 2-year college degree.

Table 2 illustrates demographic characteristics of 3,163 non-violent offenders. Among 3,163 non-violent offenders, there were 1,161 offenders had an education below high school, 1,856 offenders had a high school diploma or GED, and 146 offenders had completed a 2-year college education. In regard to characteristics of non-violent offenders, this study’s results revealed that 59.3 percent (n=689) of 1,161 non-violent offenders who had an education below high school were African American, 37.8 percent (n=439) were Caucasian, 2.7 percent (n=31)

were Hispanic, 0.1 percent (n=1) were Asian, and 0.1 percent (n=1) of offender whose race was unknown. Meanwhile, 82.8 percent (n=961) of 1,161 non-violent offenders who had an education below high school were male. A vast majority of offenders who had an education below high school were in the age range of 20-49 years old. The post-release employment rate was 57.7 percent among non-violent offenders who had an education below high school. The recidivism rate among non-violent offenders who had an education below high school was 56.8 percent.

Among 1,856 non-violent offenders who had a high school diploma or GED, results of this study revealed that 51.5 percent (n=955) were African American, 46.4 percent (n=861) were Caucasian, 1.7 percent (n=31) were Hispanic, 0.4 percent (n=8) were Asian, and 0.1 percent (n=1) of offender whose race was known. Meanwhile, 86.6 percent (n=1,607) of 1,856 non-violent offenders who had a high school diploma or GED were male. A vast majority of non-violent offenders who had a high school diploma or GED were in the age range of 20-49 years old. The post-release employment rate was 65.2 percent among non-violent offenders who had a high school diploma or GED. The recidivism rate among non-violent offenders who had a high school diploma or GED was 47.5 percent.

Among 146 non-violent offenders who had a 2-year college education, results of this study revealed that 47.3 percent (n=69) were African American, 51.4 percent (n=75) were Caucasian, 0.7 percent (n=1) were Hispanic, and 0.7 percent (n=1) were Asian. Meanwhile, 80.8 percent (n=118) of 146 non-violent offenders who had a 2-year college education were male. A vast majority of non-violent offenders who had a 2-year college education were in the age range of 20-49 years old. The post-release employment rate was 64.4 percent among non-violent

offenders who had a 2-year college education. The recidivism rate among non-violent offenders who had a 2-year college degree was 32.9 percent.

**Table 3: Demographic Characteristics of Sex Offenders (n=361)**

Variable	Below HS (n=154)	High School (n=184)	College (n=23)
<b>Offender Ethnicity</b>			
African American	71 (46.1%)	73 (39.7%)	6 (26.1%)
Caucasian	75 (48.7%)	108 (58.7%)	17 (73.9%)
Hispanic	7 (4.5%)	3 (1.6%)	0 (0.0%)
Asian	1 (0.6%)	0 (0.0%)	0 (0.0%)
<b>Offender Gender</b>			
female	37 (24.0%)	27 (14.7%)	2 (8.7%)
male	117 (76.0%)	157 (85.3%)	21 (91.3%)
<b>Offender Age</b>			
under 20 years	1 (0.6%)	0 (0.0%)	0 (0.0%)
20-29 years	61 (39.6%)	54 (29.3%)	2 (8.7%)
30-39 years	34 (22.1%)	59 (32.1%)	8 (34.8%)
40-49 years	40 (26.0%)	53 (28.8%)	9 (39.1%)
50-59 years	14 (9.1%)	14 (7.6%)	2 (8.7%)
60 years or above	4 (2.6%)	4 (2.2%)	2 (8.7%)
<b>Employment Status</b>			
unemployed	74 (48.1%)	49 (26.6%)	6 (26.1%)
employed	80 (51.9%)	135 (73.4%)	17 (73.9%)
<b>Recidivism Status</b>			
Non-recidivist	56 (36.4%)	94 (51.1%)	14 (60.9%)
recidivist	98 (63.6%)	90 (48.9%)	9 (39.1%)

Note: “Below HS” represents offenders have an education below high school, “High School” for high school diploma or GED, and “College” for the completion of a 2-year college degree.

Table 3 illustrates demographic characteristics of 361 sex offenders. Among 361 sex offenders, there were 154 offenders had an education below high school, 184 offenders had a high school diploma or GED, and 23 offenders had completed a 2-year college education. In regard to the characteristics of sex offenders, this study’s results revealed that 46.1 percent

(n=71) of 154 sex offenders who had an education below high school were African American, 48.7 percent (n=75) were Caucasian, 4.5 percent (n=7) were Hispanic, and 0.6 percent (n=1) were Asian. Meanwhile, 76.0 percent (n=117) of 154 sex offenders who had an education below high school were male. A vast majority of sex offenders who had an education below high school were in the age range of 20-49 years old. The post-release employment rate was 51.9 percent among sex offenders who had an education below high school. The recidivism rate among sex offenders who had an education below high school was 63.6 percent.

Among 184 sex offenders who had a high school diploma or GED, results of this study revealed that 39.7 percent (n=73) were African American, 58.7 percent (n=108) were Caucasian, and 1.6 percent (n=3) were Hispanic. Meanwhile, 85.3 percent (n=157) of 184 sex offenders who had a high school diploma or GED were male. A vast majority of 184 sex offenders who had a high school diploma or GED were in the age range of 20-49 years old. The post-release employment rate was 73.4 percent among sex offenders who had a high school diploma or GED. The recidivism rate among sex offenders who had a high school diploma or GED was 48.9 percent.

Among 23 sex offenders who had a 2-year college education, results of this study revealed that 26.1 percent (n=6) were African American, and 73.9 percent (n=17) were Caucasian. Meanwhile, 91.3 percent of 23 sex offenders who had a college education were male. A vast majority of sex offenders who had a 2-year college education were in the age range of 20-49 years old. The post-release employment rate was 73.9 percent among sex offenders who had a 2-year college education. The recidivism rate among sex offenders who had a 2-year college education was 39.1 percent.

**Table 4: Demographic Characteristics of Drug Offenders (n=1,422)**

Variable	Below HS (n=582)	High School (n=794)	College (n=46)
<b>Offender Ethnicity</b>			
African American	462 (79.4%)	567 (71.4%)	28 (60.9%)
Caucasian	108 (18.6%)	212 (26.7%)	18 (39.1%)
Hispanic	10 (1.7%)	12 (1.5%)	0 (0.0%)
Asian	2 (0.3%)	2 (0.3%)	0 (0.0%)
Unknown	0 (0.0%)	1 (0.1%)	0 (0.0%)
<b>Offender Gender</b>			
female	98 (16.8%)	100 (12.6%)	5 (10.9%)
male	484 (83.2%)	694 (87.4%)	41 (89.1%)
<b>Offender Age</b>			
under 20 years	11 (1.9%)	7 (0.9%)	0 (0.0%)
20-29 years	305 (52.4%)	311 (39.2%)	6 (13.0%)
30-39 years	147 (25.3%)	247 (31.1%)	16 (34.8%)
40-49 years	89 (15.3%)	172 (21.7%)	15 (32.6%)
50-59 years	26 (4.5%)	52 (6.5%)	9 (19.6%)
60 years or above	4 (0.7%)	5 (0.6%)	0 (0.0%)
<b>Employment Status</b>			
unemployed	245 (42.1%)	256 (32.2%)	16 (34.8%)
employed	337 (57.9%)	538 (67.8%)	30 (65.2%)
<b>Recidivism Status</b>			
Non-recidivist	281 (48.3%)	439 (55.3%)	32 (69.6%)
recidivist	301 (51.7%)	355 (44.7%)	14 (30.4%)

Note: “Below HS” represents offenders have an education below high school, “High School” for high school diploma or GED, and “College” for the completion of a 2-year college degree.

Table 4 illustrates demographic characteristics of 1,422 drug offenders. Among 1,422 drug offenders, there were 582 offenders had an education below high school, 794 offenders had a high school diploma or GED, and 46 offenders had completed a 2-year college education. In regard to the characteristics of drug offenders, this study’s results revealed that 79.4 percent (n=462) of 582 drug offenders who had an education below high school were African American,

18.6 percent (n=108) were Caucasian, 1.7 percent (n=10) were Hispanic, and 0.3 percent (n=2) were Asian. Meanwhile, 83.2 percent (n=484) of 582 drug offenders who had an education below high school were male. A vast majority of 582 drug offenders who had an education below high school were in the age range of 20-49 years old. The post-release employment rate was 57.9 percent among drug offenders who had an education below high school. The recidivism rate among drug offenders who had an education below high school was 51.7 percent.

Among 794 drug offenders who had a high school diploma or GED, results of this study revealed that 71.4 percent (n=567) were African American, 26.7 percent (n=212) were Caucasian, 1.5 percent (n=12) were Hispanic, 0.3 percent (n=2) were Asian, and 0.1 percent (n=1) of drug offender whose race was unknown. Meanwhile, 87.4 percent of 794 drug offenders who had a high school diploma or GED were male. A vast majority of 794 drug offenders who had a high school diploma or GED were in the age range of 20-49 years old. The post-release employment rate was 67.8 percent among drug offenders who had a high school diploma or GED. The recidivism rate among drug offenders who had a high school diploma or GED was 44.7 percent.

Among 46 drug offenders who had a 2-year college education, results of this study revealed that 60.9 percent (n=28) of 46 drug offenders were African American, and 39.1 percent (n=18) were Caucasian. Meanwhile, 89.1 percent of 46 drug offenders who had a 2-year college education were male. A vast majority of 46 drug offenders who had a 2-year college education were in the age range of 20-49 years old. The post-release employment rate was 65.2 percent among drug offenders who had a 2-year college education. The recidivism rate among drug offenders who had a 2-year college education was 30.4 percent.

This 5-year (2005-2009) longitudinal study of 6,561 released offenders in Indiana revealed that 36.1 percent (n=2,368) were never employed after release from IDOC custody. Among 4,193 employed offenders who had been employed at least one quarter after release, 47.0 percent (n=1,969) were employed 1-4 quarters, 23.4 percent (n=980) were employed 5-8 quarters, 15.5 percent (n=651) were employed 9-12 quarters, 12.6 percent (n=530) were employed 13-16 quarters, and 1.5 percent (n=63) were employed 17-20 quarters. Furthermore, this study found that an offender's education showed a positive impact on the length of employment across different types of offenders. In other words, offenders who had a higher level of formal education were likely to maintain employment for a longer period of time after their release from IDOC custody.

Specifically, as Table 5 indicates, results of this study showed that 53.1 percent of 243 violent offenders who had an education below high school and were employed at least one quarter since release in the period of 2005-2009 were employed 1-4 quarters, 20.6 percent were employed 5-8 quarters, 16.0 percent were employed 9-12 quarters, 9.9 percent were employed 13-16 quarters, and 0.4 percent were employed 17-20 quarters. In regard to 421 violent offenders who had a high school diploma or GED and were employed at least one quarter since release, 36.3 percent were employed 1-4 quarters, 30.9 percent were employed 5-8 quarters, 16.4 percent were employed 9-12 quarters, 13.5 percent were employed 13-16 quarters, and 2.9 percent were employed 17-20 quarters. In regard to 63 violent offenders who had a college education and were employed at least one quarter since release, 36.3 percent were employed 1-4 quarters, 30.9 percent were employed 5-8 quarters, 16.4 percent were employed 9-12 quarters, 13.5 percent were employed 13-16 quarters, and 2.9 percent were employed 17-20 quarters.

**Table 5: The 5-Year Follow-up Employment Rates among Employed Offenders with Different Classifications**

Had Been Employed	Violent Offenders		Nonviolent Offenders		Sex Offenders		Drug Offenders	
	Bel. HS (n=243)	High S. College (n=421)	Bel. HS (n=689)	High S. College (n=1241)	Bel. HS (n=84)	High S. College (n=140)	Bel. HS (n=344)	High S. College (n=552)
1-4 quarters	53.1%	36.3%	54.9%	47.1%	52.4%	44.3%	51.5%	44.9%
5-8 quarters	20.6%	30.9%	23.7%	22.8%	19.0%	19.3%	22.1%	21.2%
9-12 quarters	16.0%	16.4%	12.9%	15.6%	16.7%	15.0%	15.4%	17.6%
13-16 quarters	9.9%	13.5%	7.3%	13.1%	10.7%	18.6%	10.2%	15.0%
17-20 quarters	0.4%	2.9%	1.3%	1.5%	1.2%	2.9%	0.9%	1.3%

Note 1: An offender, whose education or employment information was unknown, had been excluded from this analysis.

Note 2: There were 37.0% of violent offenders, 38.2% of non-violent offenders, 36.3% of sex offenders, and 36.9% of drug offenders who were never employed after release from IDOC custody.

In terms of post-release employment among different types of offenders, as illustrated in Table 5, this study's results revealed several important findings in regard to offender's education and post-release employment. First of all, released offenders were likely to have a shorter period of employment if they had a lower level of education. Secondly, released offenders who had a college education were likely to have a longer period of employment than those offenders who had a high school diploma or GED or who had an education below high school. Thirdly, there was a similar pattern across different types of offenders (i.e., violent offenders, non-violent offenders, sex offenders, and drug offenders) in terms of a positive correlation between the length of employment and the offender's education. Finally, the "employed" offenders had a lower recidivism rate than the "unemployed" offenders after release from prison.

Table 6 illustrates results of the logistic multiple regression analyses of post-release recidivism while controlling for offender's demographics (i.e., race, gender, and age), education, and employment status. Regardless of the type of offender, the results of the regression analysis of the post-release recidivism among 6,561 released offenders (the *All Offenders* equation -- Table 6) showed that offender's demographical characteristics (i.e., race, gender, and age), education, and post-release employment were statistically correlated (at 0.05 level) with recidivism. Most importantly, results of this 5-year longitudinal study revealed that post-release employment, offender's education, and age were the most important predictors to post-release recidivism among released offenders. In other words, offenders would likely return to IDOC custody if they were unemployed, uneducated (or under-educated), and younger offenders. Meanwhile, this study's results also showed, while controlling of other factors, that African American males were likely to be recidivist offenders after release from IDOC custody.

**Table 6: Logistic Multiple Regression Analyses of the Post-Release Recidivism among the Cohort of 6,561 Offenders and Different Types of Offenders**

Variable	All Offenders (N=6,561)	Violent Offenders (n=1,201)	Nonviolent Offenders (n=3,469)	Sex Offenders (n=369)	Drug Offenders (n=1,522)
Offender Race	-.141*	-.108	-.202**	-.343	-.142
Offender Gender	.187*	.471	.219*	-.002	.103
Offender Age	-.019***	-.018**	-.015***	-.034**	-.033***
Offender Education	-.380***	-.555***	-.376***	-.453*	-.181
Employment Status	-.374***	-.352**	-.290***	-.505*	-.539***
Constant	1.555***	1.385**	1.446***	3.101***	1.726***

- Note 1: “\*” denotes that regression coefficient is statistically significant at 0.05 level, “\*\*” at 0.01 level, and “\*\*\*” at 0.001 level.
- Note 2: Due to a relatively small number of Hispanic and Asian offenders in this study, those offenders were not included in the logistic multiple analyses.
- Note 3: In this study, an offender was regarded as “employed,” if he/she was employed at least one quarter after release from IDOC custody.

Additionally, there were four separate regression analyses to examine the independent effects of offender's characteristics, education, and employment on post-release recidivism among different types of offenders. In regard to violent offenders, the results of the logistic multiple regression analysis (the *Violent Offenders* equation -- Table 6) showed that post-release employment, offender's education, and age were the most important predictors to post-release recidivism among violent offenders. Specifically, results of this study revealed that recidivist violent offenders were likely to be younger offenders who were uneducated (or under-educated) or were unemployed after release from prison. The effect of the offender's race or gender on post-release recidivism among violent offenders made no significant addition to the prediction.

In regard to non-violent offenders, the results of the regression analysis (the *Nonviolent Offenders* equation -- Table 6) showed that offender's demographical characteristics (race, gender, and age), education, and post-release employment were statistically correlated with post-release recidivism. Specifically, this study's results revealed that recidivist non-violent offenders were likely to be young, male, African American offenders, who were likely to be uneducated (or under-educated) or were unemployed after release from prison. Most importantly, the results of regression analysis showed that post-release employment, offender's education, and age were the most important predictors to post-release recidivism among non-violent offenders.

In regard to sex offenders, the results of the regression analysis (the *Sex Offenders* equation -- Table 6) showed that an offender's age, education, and post-release employment were statistically correlated (at .05 level) with post-release recidivism. Specifically, this study's results revealed that recidivist sex offenders were likely to be younger offenders who were likely to be uneducated (or under-educated) or were unemployed after release from prison. Most

importantly, the results of regression analysis showed that post-release employment, offender's education, and age were the most important predictors to post-release recidivism among sex offenders.

In regard to drug offenders, the results of the regression analysis (the *Drug Offenders* equation -- Table 6) showed that an offender's age and post-release employment were statistically correlated with the post-release recidivism. Specifically, this study's results revealed that recidivist drug offenders were likely to be younger offenders, who were likely to be unemployed after release from IDOC custody. Interestingly, the effect of offender's ethnicity, gender, or education on post-release recidivism was not statistically significant. The offender's age and post-release employment status were the most important predictors of post-release recidivism among drug offenders.

## **Discussion**

There are several important findings from this 5-year (2005-2009) longitudinal study of the post-release recidivism among 6,561 released offenders in Indiana. First of all, the recidivist offenders are likely to be characterized as unemployed, uneducated (or under-educated), African American, young, and male. Secondly, the post-employment, offender's age and education are the most important predictors of recidivism among released offenders, regardless of the type of offender. Thirdly, the offender's level of formal education functioned as an intermediate factor between post-release employment and recidivism; that is, an offender's education has a simultaneous effect on both post-release employment and recidivism. Finally, although employment is the primary predictor of recidivism, this study's results demonstrated that

employment sustainability (i.e., length of employment) was a decisive factor in reducing post-release recidivism among released offenders.

Another striking finding from this longitudinal study is that 38.1 percent of the released offenders had an education below high school and a vast majority of such offenders were under 30 years old. As Table 1 indicates, offenders who had an education below high school (e.g., high school dropouts) consistently had a higher post-release recidivism rate and a lower post-release employment rate. Surprisingly, the post-release recidivism rate among offenders who had an education below high school was 56.4 percent among violent offenders, 56.8 percent among non-violent offenders, 63.6 percent among sex offenders, and 51.7 percent among drug offenders. Such young, uneducated offenders, if there was no educational intervention in prison, would likely and frequently wander from community to prison, and vice versa. Undoubtedly, those young recidivist offenders would significantly increase the incarceration cost for the State and increase the public safety concern among law-abiding citizens in communities.

A further examination of the effect of education on post-release recidivism also revealed that uneducated (or under-educated) offenders were more likely than those offenders who had a higher education to return to IDOC custody after release, regardless of the type of offender. For example, 22.4 percent of violent offenders who had an education below high school, but only 9.9 percent of violent offenders who had a college education were re-incarcerated within 1 year after release from IDOC custody. The recidivism rate, within 2 years after release, had jumped to 43.3 percent among violent offenders who had an education below high school, but only 19.8 percent among violent offenders who had a college education. A similar pattern of post-release recidivism rates existed among other types of offenders (i.e., non-violent, sex, and drug

offenders). In sum, this study's results clearly indicated that offenders who had a lower level of education not only had a higher recidivism rate, but also such uneducated (or under-educated) offenders were likely to be re-incarcerated earlier than those offenders who had a higher level of education. Furthermore, this 5-year longitudinal study of post-release recidivism among 6,561 released offenders in Indiana also revealed that, regardless of an offender's level of education, sex offenders had a higher recidivism rate than other types of offenders (i.e., violent, non-violent, and drug offenders). In particular, the recidivism rate reached 63.6 percent among sex offenders, who had an education below high school.

A further examination of the legal reasons for returning to IDOC custody among 2,089 recidivist offenders whose legal status of re-incarceration were available, revealed that 32.7 percent were re-incarcerated due to committing a new crime, 33.8 percent had a parole violation, 25.0 percent had a probation violation, and 8.5 percent had other violations such as a violation of "community transition program" (CTP). In terms of legal reasons for re-incarceration, results of this study showed that non-violent offenders were likely to be re-incarcerated due to committing a new crime after release; violent offenders were more likely to be re-incarcerated due to a probation violation, and sex offenders were likely to be re-incarcerated due to a parole violation. There was no information detailing the types of parole or probation violations that caused offenders to be returned to IDOC custody.

This 5-year longitudinal study has expanded the understanding of the characteristics of different types of offenders in regard to post-release recidivism and employment and the contributing factors to post-release recidivism. Undoubtedly, offenders have to overcome many different barriers to reenter the community as law-abiding citizens after release from prison.

Results of this study have clearly shown that uneducated (or under-educated) offenders would encounter a variety of challenges to find a job and to maintain that job, if employed. In other words, uneducated (or under-educated) offenders are likely to be re-incarcerated after release from the prison due to their inadequacy in education and employability. Arguably, correctional education and job training programs play a crucial role in terms of increasing employability and decreasing recidivism among release offenders. In order to enhance the success of offender's reentry to community, it can anticipate that correctional education would be a viable solution to reduce recidivism and decrease the cost of incarceration.

## References

- Aos, Steve, Marna Miller, and Elizabeth Drake. (2006). *Evidence-based adult corrections programs: What works and what does not*. Olympia, WA: Washington State Institute for Public Policy.
- Allen, John P. (1988). Administering quality education in an adult correctional facility. *Community Services Catalyst*, 18(4), 28-29.
- Batiuk, Mary A. (1997). The state of post-secondary correctional education in Ohio. *Journal of Correctional Education*, 48(2), 70-72.
- Blomberg, Thomas G., Williams D. Bales, and Alex R. Piquero. (2012). Is educational achievement a turning point for incarcerated delinquents across race and sex? *Journal of Youth and Adolescence* 41(2), pp. 202-216.
- Burke, Lisa O., and James E. Vivian. (2001). The effect of college programming on recidivism rates at the Hampden County House of Correction: A 5-year study. *Journal of Correctional Education*, 52(4), 160-162.
- Chappell, Cathryn. (2004). Post-secondary correctional education and recidivism: A meta-analysis of research conducted from 1990-1999. *Journal of Correctional Education* 55(2), pp. 148-169.
- Durose, Matthew R., and Christopher J. Mumola. (2004). *Profile of nonviolent offenders exiting state prisons*. Bureau of Justice Statistics, Office of Justice Programs. U.S. Department of Justice, Washington, D.C.
- Erisman, Wendy, and Jeanne B. Contardo. (2005). *Learning to reduce recidivism: A 50-state analysis of postsecondary correctional education policy*. Washington, DC: The Institute for Higher Education Policy.
- Fabelo, Tony. (2002). The impact of prison education on community reintegration of inmates: The Texas case. *Journal of Correctional Education* 53(3), pp. 106-110.
- Fashey, Jennifer, Cheryl Roberts, and Len Engel. (2006). *Employment of ex-offenders: Employer perspectives*. Massachusetts Executive Office of Public Safety: Crime & Justice Institute.
- Finn, Peter. (1998). Job placement for offenders in relation to recidivism. *Journal of Offender Rehabilitation* 28(1/2), pp. 89-106.
- Harlow, Caroline W. (2003). *Education and correctional populations*. Bureau of Justice Statistics, U.S. Department of Justice.

- Harrison, Byron, and Robert C. Schehr. (2004). Offenders and post-release jobs: Variables influencing success and failure. *Journal of Offender Rehabilitation* 39(3), pp. 35-68.
- Hollin, Clive R., and Emma J. Palmer. (2009). Cognitive skills programmes for offenders. *Psychology, Crime & Law* 15(2&3), pp. 147-164.
- Holzer, Harry J., Steven Raphael, and Michael Stoll. (2004). Will employers hire ex-offenders?: Employer preferences, background checks, and their determinants. *Imprisoning America: The social effects of mass incarceration*, eds. Mary Patillo, David F. Weiman, and Bruce Western, pp. 205-246. New York: Russell Sage Foundation.
- Hughes, Timothy, and Doris J. Wilson. (2004). *Reentry trends in the United States*. Bureau of Justice Statistics, Office of Justice Programs. U.S. Department of Justice, Washington, D.C.
- Langan, Patrick A., and David J. Levin. (2002). *Recidivism of prisoners released in 1994*. Bureau of Justice Statistics, Office of Justice Programs. U.S. Department of Justice, Washington, D.C.
- Langan, Patrick A., Erica L. Schmit, and Matthew R. Durose. (2003). *Recidivism of sex offenders released from prison in 1994*. Bureau of Justice Statistics, Office of Justice Programs. U.S. Department of Justice, Washington, D.C.
- La Vigne, N., Davies, E., Palmer, T., & Halberstadt, R. (2008). Release planning for successful reentry: A guide for corrections, service providers, and community groups. Washington, DC: Urban Institute, Justice Policy Center.
- Linton, John. (2011). United States Department of Education Update. *Journal of Correctional Education*, 62(2), 73-76.
- Nally, John M., Susan R. Lockwood, and Taiping Ho. (2011). Employment of ex-offenders during the recession. *Journal of Correctional Education*, 62(2), 117-131.
- Nuttall, John, Linda Hollmen, and Michelle E. Staley. (2003). The effect of earning a GED on recidivism rates. *Journal of Correctional Education*, 54(3), 90-94.
- Pettit, Becky, and Christopher J. Lyons. (2007). Status and the stigma of incarceration: The labor-market effects of incarceration, by race, class, and criminal involvement. In *Barriers to reentry? The labor market for released prisoners in post-industrial America*, eds Shawn Bushway and Michael A. Stoll, pp. 203-226. New York: Russell Sage Foundation.
- Roman, John, Wendy Townsend, and Avinash S. Bhati. (2003). *Recidivism rates for drug court graduates: Nationally based estimates*. The Urban Institute, Washington, D.C.

- Rossman, Shelli B., and Caterina G. Roman, C. (2003). *Case-managed reentry and employment: Lessons from the opportunity to succeed program*. Washington, DC: The Urban Institute, Justice Police Center.
- Solomon, Amy, Christy Visher, Nancy La Vigne, and Jenny Osbourne. (2006). *Understanding the challenges of prisoner reentry: Research findings from the Urban Institute's prisoner reentry portfolio*. Washington, DC: The Urban Institute.
- Steurer, Stephen J., and Linda G. Smith. (2003). *Education reduces crime: Three-state inmate recidivism study*. Lantham, MD: Correctional Education Association.
- Steurer, Stephen J., Linda Smith, and Alice Tracy. (2001). *Three state recidivism study*. Lantham, MD: Correctional Education Association.
- Travis, Jeremy. (2005). *But they all come back: Facing the challenges of prisoner reentry*. Washington, DC: The Urban Institute.
- Uggen, Christopher. (2000). Work as a turning point in the life course of criminals: A duration model of age, employment, and recidivism. *American Sociological Review* 67(3), pp. 529-546.
- Uggen, Christopher, and Jeremy Staff. (2001). Work as a turning point for criminal offenders. *Corrections Management Quarterly* 37(4), pp. 347-368.
- Vacca, James S. (2004). Educated Prisoners Are Less Likely to Return to Prison. *Journal of Correctional Education*, 55(4), 297-305.
- Visher, Christy, Sara Bebus, and Jennifer Yahner. (2008). *Employment after prison: A longitudinal study of releases in three states*. Washington, DC: The Urban Institute.
- Wilson, David B., Catherine A. Gallagher, and Doris L. MacKenzie. (2000). A meta-analysis of correction-based education, vocation, and work programs for adult offenders. *Journal of Research in Crime and Delinquency* 37(4), pp. 347-368.
- Winterfield, Laura, Coggeshall, Mark, Burke-Storer, Michelle, and Vanessa Correa. (2009). *The effects of postsecondary correctional education—Final report*. Urban Institute, Washington, DC: Justice Policy Center.