



Race, Education, Employment, and Recidivism among Offenders in the United States: An Exploration of Complex Issues in the Indianapolis Metropolitan Area

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Abstract

It is a general assumption that ex-offenders would likely fall into a life of crime if they could not find a job after release from prison. Prior studies showed that African American ex-offenders would have a higher recidivism rate because they would likely return to urban neighborhoods characterized by poverty, unemployment, and crime. The present researchers conducted a 5-year follow-up study of 3,869 released offenders in an attempt to analyze the effect of post-release employment on recidivism. This study's results clearly indicated that post-release employment was the most influential factor on recidivism, regardless of the offender's ethnicity. Unemployment was the most influential factor to recidivism, regardless of an offender's race and education.

Keywords: Race, Education, Employment, Recidivism, Offenders, the United States.

Introduction

While responding to a high crime rate in urban communities, local criminal justice agencies have increasingly arrested those who violate the law, and incarcerated them in state correctional facilities. Even though the overall prison population in the United States declined for the first time since 1972, the number of ex-offenders returning to their communities located in metropolitan areas dramatically increased in recent years. However, local governments generally lacked resources to support offender reentry initiatives in these metropolitan areas (Guerino, et al., 2012). Previous researchers (Rossman & Roman, 2003; Uggen, 2000; Vacca, 2004; Visser, et al., 2005) identified a

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variety of factors, such as educational deficiency, lack of job skills, criminal history, housing accommodations, employment opportunities, or deteriorating neighborhoods, that might significantly contribute to a relatively high recidivism rate among ex-offenders.

Upon release from prison, the most challenging obstacle released offenders have to overcome is to successfully reenter the labor market (i.e., find a job). Quite often, the offender's criminal record becomes a significant barrier to employment because employers are reluctant to hire ex-offenders (Giguere & Dundes, 2002; Gunnison & Helfgott, 2010; Lukies, et al., 2011). Additionally, ex-offenders generally lack up-to-date job skills or education to meet the job demands from a variety of industrial sectors after a relatively long period of time of incarceration. Post-release employment is consistently perceived as the most influential factor on an offender's reentry into the community and recidivism as well (Lockwood, et al., 2015, 2012; Nally, et al., 2014(a), 2014(b), 2012). Nonetheless, there is little research demonstrating a systematic analysis of such complex issues as an offender's race and education associated with post-release employment and recidivism for those offenders who return to a metropolitan area after release from prison. The main focus of the present study intends to explore the interrelationships and racial disparities (or similarities) in post-release employment and recidivism, while controlling for an offender's level of formal education, among ex-offenders who returned to the Indianapolis metropolitan area after release from prison.

Impacts of Ex-Offenders on Urban Communities

A consistent finding indicates that residential segregation and economic inequality have exerted significant impacts on racial disparities in recidivism among ex-offenders when they returned to their neighborhoods in metropolitan areas after release from prison (Chamberlain & Wallace, 2015; Like, 2011; Reisig, et al., 2007; Wang, et al., 2010; Wehrman, 2010). Due to an array of underlying socio-economic problems in urban communities, ex-offenders, African American ex-offenders, in particular, would likely have a higher recidivism rate because they would usually return to neighborhoods saturated with poverty, unemployment, and crime. Specifically, post-release recidivism was significantly correlated with unemployment among ex-offenders (Blomberg, et al., 2012; Burke & Vivian, 2001; La Vigne, et al., 2008; Lockwood, et al., 2015; Steurer & Smith, 2003; Uggen, 2000). In other words, ex-offenders would exacerbate the crime problems in urban neighborhoods if there were insufficient supporting mechanisms to assist their reentry into those communities upon release from prison.

Undoubtedly, the impacts of crime on residents and businesses in urban communities are very significant and consequential. One principal cause of the decline of the quality of life among residents living in urban communities in metropolitan areas is "fear of crime" (DeLone, 2008; Jackson & Stafford, 2009; Jacson & McLoyd, 2015; Latkin & Curry, 2003; Snedker, 2015). Latkin and Curry (2003) indicated that "fear of crime" could also exert a corrosive effect on mental health among residents, the elderly, in particular, due to their fear of being victimized in urban residential neighborhoods. Meanwhile, there are a variety of detrimental impacts on urban youth, including exposure to violence and crime (e.g., drive-by shooting or gang-related violence) in the urban community (Blasko, et al., 2015; Lewis, et al., 2010; Milam, et al., 2012; Stoddard, et al., 2011). Particularly, the safety issues of urban youth have been frequently raised when the youth become innocent victims of gun violence in urban neighborhoods.

Another significant impact of crime on urban communities is declining property values due to widespread violence or drug problems embedded in the neighborhoods (Kirk and Laub, 2010; Linden & Rockoff, 2008; Pope & Pope, 2012). There are several clear indications associated with declining property values in urban neighborhoods, which include: (1) increased drug or crime hot spots in neighborhoods, (2) increased residential migration or relocation, (3) increased poverty rate among residents who could not relocate due to their limited financial capacity, and (4) increased police presence to combat crime problems in deteriorated neighborhoods. Undoubtedly, crime-ridden communities in metropolitan areas likely encounter business development issues, which, in turn, significantly reduce job opportunities for urban residents. The relationship between unemployment and crime has been empirically verified (Engelhardt, 2010; Fallahi & Rodriguez, 2014; Lin, 2008; Mauro & Carmeci, 2007; Raphael & Winter-Ebmer, 2001; Wallace, 2015). Particularly, previous researchers consistently revealed that a lack of employment opportunities in declining urban neighborhoods significantly contributed to a high crime rate in those neighborhoods and other metropolitan areas as well.

Most importantly, post-release employment has been considered the most influential factor to determine recidivism among released offenders (D'Alessio, et al., 2013; Nally, et al., 2011; Varghese, et al., 2010). Undoubtedly, ex-offenders would encounter a variety of challenges in finding a job after release from prison. Another major challenge to reducing the recidivism rate among ex-offenders, which is relevant to an offender's employability, is educational deficiency. Quite often, ex-offenders would not be educationally competent to meet the job demands because they did not possess sufficient education or training prior to release from prison. Consequently, educationally-illiterate ex-offenders were dis-proportionally unemployed and would likely have a higher recidivism rate after release from prison (Chappell, 2002; Erisman & Contardo, 2005; Nally, et al., 2012; Steurer & Smith, 2003). Furthermore, the U.S. Department of Education (2012) indicated that the school drop-out rate in 2010, in the age group of 16-24 years old, was 8.0 percent among African Americans, but only 5.1 percent among Caucasians. Racial disparities in educational deficiency further exacerbated many different social problems in urban communities where a majority of offenders would likely reside after release from prison.

There is a common belief that ex-offenders will reenter urban communities successfully if they can find a job after release from prison, because they would be more likely to be financially independent. Nonetheless, there is insufficient research examining post-release employment and its impact on recidivism among ex-offenders released from prison and returned to urban neighborhoods in metropolitan areas. The present researchers conducted a 5-year (2005-2009) follow-up study to explore the relationship between post-release recidivism and employment among ex-offenders, while controlling for the offender's race and level of formal education, who returned to urban neighborhoods in the Indianapolis metropolitan area. These racial or educational disparities (or similarities) in post-release employment and recidivism will advance our knowledge about challenges that offenders have encountered while reentering urban neighborhood after release from prison.

Methodology

Data Description

The present study focused on those 3,927 offenders who were released from prison during 2005 and returned to urban neighborhoods in the Indianapolis metropolitan area in the State of Indiana. Due to a relatively small sample size of Hispanic offenders (n=45) and Asian offenders (n=12), they were excluded from the present analyses in this study. (One offender whose race was unknown was also excluded from the present study analysis.) Therefore, the total sample in the present study was 3,869 released offenders, which was comprised of 1,412 Caucasian offenders and 2,457 African American offenders. Most importantly, the present researchers conducted a 5-year (2005–2009) follow-up study in an attempt to examine racial disparities or similarities in post-release recidivism and employment among those 3,869 released offenders who returned to the Indianapolis metropolitan area.

The dataset of the present study was collected from three (3) primary data sources: (1) IDOC Division of Research and Planning, (2) IDOC Education Division, and (3) Indiana Department of Workforce Development (IDWD). The IDOC Division of Research and Planning provided up-to-date offender data such as offenders' demographical characteristics or legal information (e.g., recidivism). The IDOC Education Division provided data relative to offenders' level of education prior to release from IDOC custody. Based upon information from employed offender's W-9 forms, the Indiana Department of Workforce Development (IDWD) provided offender's post-release employment information (e.g., job title or income), if employed. The IDWD documented offender's employment information on a quarterly basis. However, there would be no employment information among released offenders if they had never been employed during the study period.

Dependent Measure

The post-release recidivism was measured by re-incarceration by IDOC during the study period of 2005–2009. Through reviewing IDOC files on offender's release dates and the return dates among recidivist offenders, the present researchers determined the recidivism status. Meanwhile, the present researchers examined the survival time, by calculating the elapsed time between the date of re-incarceration and the initial release in 2005, to analyze the length of elapsed time before recidivist offenders were re-incarcerated. Undoubtedly, the Indiana Department of Workforce Development (IDWD) provided crucial employment-related information among released offenders which allowed the present researchers to analyze racial disparities or similarities in post-release employment between Caucasian and African American offenders when they returned to the Indianapolis metropolitan area after release from prison. In this study, employment-related information, such as, the length of employment and wage, were used to analyze the impact of post-release employment on recidivism.

Data Analysis and Independent Variables

Data analyses in this study were primarily focused on examining contributing factors on post-release recidivism among offenders who returned to the Indianapolis metropolitan area after release from prison in 2005. Independent variables in this study included

offender's characteristics (i.e., race, gender, age, and education) and employment-related information such as wage. Another focus of data analysis in this study was to examine racial disparities or similarities in post-release employment. The effects of offender's characteristics and post-release employment on recidivism were carefully examined in order to understand contributing factors in determining racial disparities in post-release recidivism between Caucasian and African American offenders. Due to the dichotomous nature of dependent measurement (recidivist offenders versus non-recidivist offenders), a logistic multiple regression analysis was used to examine the effect of offenders' characteristics and post-release employment on recidivism in three different samples (all released offenders, Caucasian offenders, and African American offenders). The multiple regression analyses would provide a clear indication of which offender's characteristics exerted the most influential impact on recidivism among Caucasian and African American offenders.

Findings

As Table 1 illustrates, this 5-year follow-up study showed that 63.5 percent (n=2,457) of a total of 3,869 offenders, who returned to urban neighborhoods in the Indianapolis metropolitan area after release from prison, were African American. Results of this study also found that 50.1 percent (n=1,940) of offenders had a high school diploma or GED, 4.3 percent (n=143) had completed a 2-year college degree, and 36.7 percent (n=1,420) had an education below high school. Approximately 62.4 percent (n=2,415) of 3,869 offenders were employed at least 1 quarter in the study period of 2005-2009, but 37.6 percent (n=1,454) had never been employed. The post-release recidivism rate among 3,869 released offenders was 52.4 percent. Furthermore, the present researchers found that 26.8 percent (n=544) of 2,027 recidivist offenders were re-incarcerated twice, 8.4 percent (n=170) were re-incarcerated three times, and 1.6 percent (n=33) were re-incarcerated four times in this study period of 2005-2009.

Based upon available information, this study's results revealed that more than 51 percent (n=679) of 1,335 recidivist offenders were re-incarcerated due to committing a new crime, 17 percent (n=227) of offenders were re-incarcerated due to a technical parole violation, 31 percent (n=413) of offenders were re-incarcerated due to a technical probation violation, and 1 percent (n=16) of offenders were re-incarcerated due to other violations. Based upon available information, this study also revealed that 38 percent (n=773) of recidivist offenders were involved in property crimes, 8 percent (n=156) of recidivist offenders were involved in violent crimes, 21 percent (n=434) of recidivist offenders were involved in drug crimes, 4 percent (n=84) of recidivist offenders were involved in sex crimes, and 29 percent (n=577) of recidivist offenders were involved in other types of crimes.

Table 1. Major characteristics of offenders returned to Indianapolis metropolitan area

Variable	Caucasian (n=1,412)	African American (n=2,457)	Overall (N=3,869)
Offender Gender			
female	221 (15.7%)	305 (12.4%)	526 (13.6%)
male	1191 (84.3%)	2152 (87.6%)	3343 (86.4%)
Offender Age			
under 20 years old	19 (1.3%)	60 (2.3%)	79 (2.0%)
20-29 years old	487 (34.5%)	954 (38.8%)	1441 (37.2%)
30-39 years old	429 (30.4%)	733 (29.8%)	1162 (30.0%)
40-49 years old	363 (25.7%)	531 (21.6%)	894 (23.1%)
50-59 years old	98 (6.9%)	156 (6.3%)	254 (6.6%)
60 years old or above	16 (1.1%)	23 (0.9%)	39 (1.0%)
Offender Education			
below high school	447 (31.7%)	973 (39.6%)	1420 (36.7%)
high school or GED	748 (53.0%)	1192 (48.5%)	1940 (50.1%)
college	86 (6.1%)	79 (3.2%)	165 (4.3%)
unknown	131 (9.3%)	213 (8.7%)	344 (8.9%)
Recidivism Rate among Offenders			
non-recidivist offender	709 (50.2%)	1133 (46.1%)	1842 (47.6%)
recidivist offender	703 (49.8%)	1324 (53.9%)	2027 (52.4%)
Times of Re-Incarceration¹			
re-incarcerated once	432 (61.5%)	848 (64.0%)	1280 (63.2%)
re-incarcerated twice	205 (29.2%)	339 (25.6%)	544 (26.8%)
re-incarcerated three times	57 (8.1%)	113 (8.5%)	170 (8.4%)
re-incarcerated four times	9 (1.3%)	24 (1.8%)	33 (1.6%)
Legal Reason for Re-Incarceration²			
committed a new crime	259 (55%)	420 (48%)	679 (51%)
parole violation/technical	82 (18%)	145 (17%)	227 (17%)
probation violation/technical	121 (26%)	292 (34%)	413 (31%)
other violations	5 (1%)	11 (1%)	16 (1%)
Recidivist Offenses³			
property crime	311 (44%)	462 (35%)	773 (38%)
violent crime	44 (6%)	98 (7%)	156 (8%)
drug crime	77 (11%)	357 (27%)	434 (21%)
sex crime	33 (5%)	51 (4%)	84 (4%)
other crimes	236 (34%)	355 (27%)	577 (29%)
Employment Status⁴			
unemployed	508 (36.0%)	946 (38.5%)	1454 (37.6%)
employed	904 (64.0%)	1511 (61.5%)	2415 (62.4%)

Note #1: Statistics only apply to recidivist offenders.

Note #2: Statistics were based on the first recidivist offense after release in 2005.

Note #3: Statistics were based on the first recidivist offense after release in 2005. There were 2,024 offenses among all offenders, 1,323 offenses among African American offenders, and 701 offenses among Caucasian offenders.

Note #4: An offender was regarded as "employed" if he or she had at least 1 quarter of employment in any given year in this study period.

As Table 1 indicates, this study's results revealed 39.6 percent (n=973) of 2,457 African American offenders, but only 31.7 percent (n=447) of 1,412 Caucasian offenders, had an education below high school upon release from prison. The post-release employment (or unemployment) was similar between African American offenders and Caucasian offenders. However, this 5-year (2005-2009) follow-up study showed the post-release recidivism rate among 2,457 African American offenders and 1,412 Caucasian offenders was 53.9 percent and 49.8 percent, respectively.

Based upon available information, this study's results revealed that 48 percent (n=420) of 868 African American recidivist offenders were re-incarcerated due to committing a new crime, 17 percent (n=145) were re-incarcerated due to a technical parole violation, 31 percent (n=413) were re-incarcerated due to a technical probation violation, and 1 percent (n=11) were re-incarcerated due to other violations. Based upon available information, this study also revealed that 35 percent (n=462) of African American recidivist offenders were involved in property crimes, 7 percent (n=98) were involved in violent crimes, 27 percent (n=357) were involved in drug crimes, 4 percent (n=51) were involved in sex crimes, and 27 percent (n=355) were involved in other types of crimes.

On the other hand, this study's results revealed that 55 percent (n=259) of 467 Caucasian recidivist offenders were re-incarcerated due to committing a new crime, 18 percent (n=82) were re-incarcerated due to a technical parole violation, 26 percent (n=121) were re-incarcerated due to a technical probation violation, and 1 percent (n=5) were re-incarcerated due to other violations. Based upon available information, this study also revealed that 44 percent (n=311) of Caucasian recidivist offenders were involved in property crimes, 6 percent (n=44) were involved in violent crimes, 11 percent (n=77) were involved in drug crimes, 5 percent (n=33) were involved in sex crimes, and 34 percent (n=236) were involved in other types of crimes.

Table 2 illustrates the unemployment rates among Caucasian and African American offenders, with different educational levels, when they returned to the Indianapolis metropolitan area after the initial release from prison. Regardless of the offender's race and education, this study's results clearly revealed that offenders would remain virtually unemployed within the first year of release from prison. Such findings indicated that finding a job was the most challenging issue among released offenders during the initial phase of offenders' reentry into the urban communities.

It is important to note that the most recent economic recession in the United States occurred starting at the 4th quarter of 2007 and ended at the 4th quarter of 2008. In addition to an offender's insufficient education, lack of job skills, or criminal background, the economic recession might have exerted a significant and negative impact on employment among released offenders when they returned to the Indianapolis metropolitan areas. As this study's results showed, the unemployment rates steadily decreased from the range of 90 percent (from 1st quarter to 4th quarter of 2005) into the range of 60 percent during the pre-recession period (from 1st quarter of 2006 to 4th quarter of 2007), but quickly increased to 70-80 percent during the recession and in the post-recession period (2009). Regardless of the offender's race, released offenders had a consistently high unemployment rate while compared to the unemployment rate among the general population during this study period (2005-2009).

Table 2. Unemployment rates (in percentage) among African American and Caucasian offenders with a different level of education

Time Period	African American			Caucasian		
	Below High School	High School	College	Below High School	High School	College
2005 1 st Quarter	97.3	95.8	97.9	98.4	97.5	99.9
2005 2 nd Quarter	96.9	94.5	96.2	98.9	96.2	98.5
2005 3 rd Quarter	95.4	91.9	93.0	98.1	94.5	90.3
2005 4 th Quarter	94.5	90.6	90.9	97.4	93.2	94.6
2006 1 st Quarter	70.4	58.9	51.4	71.2	61.0	46.9
2006 2 nd Quarter	67.7	57.2	58.8	69.4	57.6	51.4
2006 3 rd Quarter	66.7	58.0	49.3	73.1	61.3	49.3
2006 4 th Quarter	67.5	58.9	53.1	76.1	62.9	52.1
2007 1 st Quarter	74.7	67.5	56.3	78.3	68.5	59.4
2007 2 nd Quarter	75.5	66.6	50.0	76.6	67.4	56.9
2007 3 rd Quarter	71.2	62.9	49.2	80.3	65.5	57.7
2007 4 th Quarter	73.3	66.8	52.4	82.3	68.3	55.7
2008 1 st Quarter	79.9	71.8	47.7	84.7	69.5	62.5
2008 2 nd Quarter	79.8	71.7	55.2	81.7	69.8	58.3
2008 3 rd Quarter	78.9	70.4	60.0	83.2	71.9	64.0
2008 4 th Quarter	81.8	72.9	62.0	80.7	75.8	64.5
2009 1 st Quarter	85.6	77.7	73.9	84.7	79.5	71.6
2009 2 nd Quarter	84.1	77.5	76.5	81.7	76.8	64.4
2009 3 rd Quarter	85.6	78.6	74.2	83.2	79.6	69.0
2009 4 th Quarter	80.0	73.7	64.2	80.7	78.6	64.8

Table 3. Recidivism rate (in percentage) among African American and Caucasian offenders with a different level of education

Time Return	African American			Caucasian		
	Below High School	High School	College	Below High School	High School	College
Within 3 months	3.1	3.7	3.8	3.8	2.5	1.2
Within 6 months	11.3	9.9	10.1	11.4	9.5	4.7
Within 9 months	19.9	16.9	13.9	21.0	17.1	8.2
Within 12 months	28.4	23.4	17.7	28.8	24.2	12.9
Within 15 months	35.0	28.9	21.5	36.9	27.9	21.0
Within 18 months	39.9	33.8	26.6	42.9	32.4	22.2
Within 21 months	45.3	38.7	32.9	46.9	36.0	26.9
Within 24 months	49.5	42.0	34.2	49.6	40.1	30.4
Within 27 months	53.0	44.3	36.7	52.5	42.0	31.6
Within 30 months	54.8	45.6	38.0	53.6	43.7	31.6
Within 33 months	55.4	46.8	38.0	54.0	44.6	31.6
Within 36 months	55.6	47.1	38.0	54.2	45.0	31.6
Within 39 months	55.7	47.4	38.0	54.6	45.4	31.6
Within 42 months	56.4	48.0	38.0	54.8	46.5	32.8
Within 45 months	57.1	48.9	39.3	55.2	47.4	32.8
Within 48 months	57.9	49.9	39.3	55.9	48.2	32.8
Within 51 months	58.9	51.5	39.3	57.7	48.9	32.8
Within 54 months	59.8	52.2	40.5	58.6	49.0	34.0
Within 57 months	60.3	52.2	40.5	58.8	49.2	34.0
Within 60 months	60.7	52.5	40.5	59.1	49.2	34.0

Table 4. Logistic multiple regression analyses of the post-release recidivism among offenders returned to Indianapolis metropolitan area

Variable	Caucasian (n=1,412)	African American (n=2,457)	Overall (N=3,869)
Offender Race	n/a	n/a	-.045
Offender Gender	.133	.346*	.236
Offender Age	-.036***	-.024***	-.028***
Offender Education	-.348*	-.128	-.149*
Length of Employment	-6.974***	-.249***	-.345***
Wage	-2.299	-.003***	-.005***
Constant	2.060	1.271	1.564

Note #1: “*” denotes that coefficient is statistically significant at 0.05 level, “**” at 0.01 level, and “***” at 0.001 level.

Note #2: “n/a” means that statistic is not applicable in that equation.

Note #3: The Variable of “Length of Employment” is measured by quarter.

Except for the first year of the initial release (from 1st quarter to 4th quarter of 2005), this study found that released offenders with a higher level of formal education consistently had a lower unemployment rate, regardless of the offender’s race. The results of this study revealed that Caucasian and African American offenders who did not complete high school or a GED had a higher unemployment rate when compared to offenders with a high school diploma or a 2-year college degree. Even though released offenders sustained a high unemployment rate after release from prison, this study clearly indicated that the offender’s level of formal education was an important factor to obtaining employment when re-entering urban communities.

Table 3 illustrates the recidivism rate among African American and Caucasian offenders, with a different level of education, while returning to the Indianapolis metropolitan area after the initial release from prison. As indicated in the above-mentioned statements, this study found that offenders would remain virtually unemployed within the first year of release from prison. Results of this study also revealed that a notable number of released offenders were re-incarcerated within 12 months after the initial release from prison. Among African American offenders, this study found that 28.4 percent in a total of 973 offenders, who had an education below high school, were re-incarcerated within the first year of release; 23.4 percent in a total of 1,192 offenders, who had a high school diploma or GED, were re-incarcerated within the first of release; but only 17.7 percent in a total of 79 offenders, who had a 2-year college degree, were re-incarcerated within the first year of release. Furthermore, this study’s results revealed that almost half of African American offenders (49.5%), who had an education below high school, were re-incarcerated within 2 years (24 months) after the initial release from prison; 42.0 percent of offenders, who had a high school diploma or GED, were re-incarcerated within 2 years after the initial release from prison; but only 34.2 percent of

offenders, who had a college education, were re-incarcerated within 2 years after the initial release from prison. This 5-year follow-up study revealed that the recidivism rate among African American offenders, who had an education below high school, was 60.7 percent; the recidivism rate was 52.5 percent among offenders with a high school diploma or GED; and the recidivism rate was 40.5 percent among offenders with a 2-year college degree.

On the other hand, this study's results showed a similar pattern among Caucasian offenders in terms of recidivism rates when returning to the Indianapolis metropolitan area after release from prison. Among Caucasian offenders, this study found that 28.8 percent of a total of 447 offenders, who had an education below high school, were re-incarcerated within the first year of release; 24.2 percent of a total of 748 offenders, who had a high school diploma or GED, were re-incarcerated within the first of release; but only 12.9 percent of a total of 86 offenders, who had a 2-year college degree, were re-incarcerated within the first year of release. Furthermore, this study's results revealed that almost half of the African American offenders (49.6%), who had an education below high school, were re-incarcerated within 2 years (24 months) after the initial release from prison; 40.1 percent, who had a high school diploma or GED, were re-incarcerated within 2 years after the initial release from prison; but only 30.4 percent, who had a college education, were re-incarcerated within 2 years after the initial release from prison. This 5-year follow-up study revealed that the recidivism rate among Caucasian offenders, who had an education below high school, was 59.1 percent; the recidivism rate was 49.2 percent among offenders with a high school diploma or GED; and the recidivism rate was 34.0 percent among offenders with a 2-year college degree. Regardless of the offender's race, as Table 3 indicates, results of this study consistently revealed that less-educated offenders were likely re-incarcerated after the initial release from prison.

The present researchers examined the effect of the offender's demographic characteristics (e.g., age) and employment-related factors (e.g., the length of employment) on post-release recidivism among those who returned to the Indianapolis metropolitan area after release. Results of logistic multiple regression analysis (the *Overall* equation -- Table 4) indicated that an offender's age and education were statistically and significantly correlated ($p < .05$) with recidivism. Specifically, results of this study found that younger offenders or uneducated (or under-educated) offenders were likely to become recidivist offenders. Furthermore, this study also revealed post-release recidivism was statistically, but negatively, correlated ($p < .001$) with the length of employment or wage. In other words, offenders were unlikely to be recidivist offenders if they were employed for an extended period and a higher wage, after release from prison. Most importantly, results of this study showed that an offender's race had no effect on post-release recidivism when returned to the metropolitan Indianapolis area upon release.

In regard to 1,412 Caucasian offenders, results of the logistic multiple regression analysis (the *Caucasian* equation -- Table 4) showed offender's age and level of education were statistically, but negatively, correlated ($p < .05$) with post-release recidivism. In other words, this study's results revealed younger or uneducated (or under-educated) Caucasian offenders were likely to be recidivist offenders when they returned to the Indianapolis metropolitan area after release from prison. Most importantly, this study indicated post-release employment in terms of the length of employment was the most important predictor of recidivism among Caucasian offenders, while controlling for other variables.

Among 2,457 African American offenders, results of the logistic multiple regression analysis (the *African American* equation -- Table 4) showed offender's demographic characteristics (i.e., gender and age) were statistically correlated ($p < .05$) with recidivism. In other words, this study's results revealed that male or younger African American offenders were likely to be recidivist offenders when they returned to the Indianapolis metropolitan area after release from prison. Similar with results of Caucasian offenders, this study found post-release employment (in terms of the length of employment) was the most important predictor of recidivism among African American offenders, while controlling for other variables. Surprisingly, the effect of "education" made no significant addition to the prediction among those 2,457 African American offenders.

Discussion and Conclusion

At its core, as this study's results indicate, post-release employment was the most influential factor impacting recidivism among those offenders who returned to the Indianapolis metropolitan area after release from prison. Even though the economy and job opportunities in the Indianapolis metropolitan area were better than other regions in Indiana during the study period, offenders encountered a variety of difficulties obtaining employment before, during, and after the economic recession of 2008. This study's results clearly showed released offenders had a relatively high unemployment rate when they returned to the Indianapolis metropolitan area. Researchers (Engelhardt, 2010; Parker & Horwitz, 1986; Phillips & Land, 2012; Smith, et al., 1992; Uggen, 2000) consistently revealed released offenders were likely to be recidivist offenders if they were unemployed after release from prison. A further examination showed the recidivism rate was close to 60 percent among those offenders who did not gain employment when they returned to the Indianapolis metropolitan area.

This study's results indicated offender's race was not a predictor of recidivism. However, racial disparities in post-release recidivism were significant while the effect of race was studied with other factors such as age, education, or employment. This study found that a notable number of released offenders were young offenders, uneducated (or under-educated) offenders, or African American offenders. For example, a further examination showed the recidivism rate as 73.6 percent among African American offenders and 67.9 percent among Caucasian offenders who had an education below high school, under age 30, and unemployed. Nonetheless, the recidivism rate was significantly lower as an offender's level of education increased. Results of this study revealed the recidivism rate was 49.3 percent among African American offenders and 50.0 percent among Caucasian offenders who had a high school diploma or GED, under age 30, and were employed when they returned to the Indianapolis metropolitan area after release from prison.

This study found 41.5 percent of African American offenders and 30.6 percent of Caucasian offenders who were under age 30 and had an education below high school, had never been employed when they returned to the Indianapolis metropolitan area after release from prison. However, the unemployment rate decreased when an offender's level of education increased. This study's results indicated only 31.8 percent of African American offenders and 23.6 percent of Caucasian offenders were under age 30 and had a high school diploma or GED when they returned to the Indianapolis metropolitan area

after release from prison. This study's results clearly indicated post-release employment was the primary predictor of recidivism, regardless of offender's race.

Undoubtedly, correctional education could play a crucial role to improve an offender's education and job skills prior to release from prison (Burke & Vivian, 2001; Nuttall et al., 2003; Rose, et al., 2010). In fact, IDWD provided "*Career and Technical Education Programs*" to unemployed workers across the State of Indiana. Such skill-oriented training programs should also extend to ex-offenders upon release from prison; which, in turn, would increase opportunities for post-release employment and decrease the recidivism rate among released offenders when they return to their communities. This study's results clearly showed released offenders would less likely recidivate if they could find a job upon release from prison and retain employment for a sustained period.

Most importantly, this study found post-release employment was the most influential factor impacting recidivism among released offenders. The unemployment rate among released offenders was 9-10 times higher than the general population in the Indianapolis metropolitan area. Furthermore, the recent economic recession of 2008, undoubtedly, exacerbated the unemployment rate among released offenders. Results of this study consistently revealed released offenders likely would have a relatively high unemployment rate, regardless of economic conditions. On the other hand, this study also found job sectors that likely would employ released offenders had shifted from "construction" or "manufacturing" to "temporary help services" or "lodging and food services."

This study also revealed that employment sustainability has always been a great challenge to ex-offenders, if employed. Furthermore, results of this study revealed that offenders likely would be marginally-employed, regardless of ethnicity. Among 2,415 employed offenders, this study's results revealed 47.8 percent (n=1,156) of offenders had 1-4 quarters of employment, 23.4 percent (n=567) had 5-8 quarters of employment, 15.1 percent (n=366) had 9-12 quarters of employment, and 13.7 percent (n=326) had more than 12 quarters of employment during the study period of 2005-2009. Racial disparities in the length of employment and employment sustainability were not significant between African American offenders and Caucasian offenders. Most importantly, this study's results implicate correctional education programs should modify curriculum and provide up-to-date skill-based programs for incarcerated inmates. Such educational efforts could increase employability and job sustainability among offenders upon release from prison.

One obvious challenge is how to improve employability among African American offenders when they returned to communities embedded with poverty and crime in the Indianapolis metropolitan area. This study found a majority of offenders who returned to the Indianapolis metropolitan area after release from prison were young, uneducated (under-educated), African American males. It is important to provide outreach services, such as job training or adult education, to those uneducated offenders in an effort to reduce post-release recidivism. For example, the *Second Chance Act* that Congress passed in 2008 greatly emphasized the importance of job training and placement services to ex-offenders to reduce recidivism and increase public safety. This *Act* also indicated the importance of providing resources to community and faith-based organizations to enhance mentoring and transitional services for ex-offenders when they returned to communities after release from prison. The City of Indianapolis could continue its comprehensive prisoner reentry initiative and plan through cooperation with a variety of agencies, such as, Indiana Department of Correction (IDOC), Indiana Department of Workforce Development (IDWD), local community leaders, faith-based organizations, and employers

from a variety of job sectors. In doing so, released offenders would have a better chance to successfully reenter the community; which, in return, would significantly reduce the post-release recidivism rate.

Implications and Solutions

The results of the 5-year follow-up study of ex-offenders who returned to urban neighborhoods in the Indianapolis metropolitan area clearly revealed that low-skilled offenders (i.e., uneducated or under-educated offenders) would likely have a higher unemployment rate and a higher recidivism rate after release from IDOC custody. Realistically, a notable number of offenders might not have opportunities to enroll in any educational program during incarceration due to limited funding and an ever-increasing number of uneducated inmates. The Education Division of the Indiana Department of Correction consistently found that a notable number of incarcerated inmates might not have sufficient time to enroll and/or complete the program's requirements due to early release or the completion of time served. As results of the present study revealed, such uneducated ex-offenders would likely be unemployed and become recidivist offenders once they returned to urban neighborhoods in the Indianapolis metropolitan area.

Quite often, there are insufficient support services to assist ex-offenders reentering the community after release from prison. It is clear that ex-offenders need aftercare services which support them with finding a job in the community upon release. Ex-offenders could be assigned to community caseworkers to work with them to coordinate services through community-based education providers. For example, the Indiana Department of Workforce Development (IDWD) Region 5 (serving City of Indianapolis and its surrounding counties) provides education-and-employment-related services to residents in the Indianapolis metropolitan area. Additionally, the *Hoosier Initiative for ReEntry (HIRE)* Program is designed collaboratively between IDOC-IDWD for ex-offenders returning to their communities. Staff members from the *HIRE* Program identify offenders prior to release and work with them to enhance their employability in the community after release from prison. This program could be expanded to meet the needs of an ever-increasing ex-offender population.

In 2003, Indiana was one of eight states to pilot the National Institute of Corrections' *Transition from Prison to Community (TPC)* Initiative. The goals of TPC included successful offender reentry to enhance public safety, collaboration with internal and external stakeholders, and the use of correctional practices based on evidence. As a result of the initiative, IDOC integrated case management functions into the Unit Team structure. Now, reentry begins at the time the offender enters the IDOC, where an actuarial, statistically validated risk-needs assessment is completed for each offender. The assessment is used to design a case plan that drives programming and allows the offender to set goals for reentry. Evidence-based programs include education, vocational training, life skills, substance abuse treatment, and cognitive-behavioral courses designed to transform behavior. During the case planning process, barriers to effective re-entry are identified and interventions are developed to address the barriers. The case plan is reviewed by the IDOC case manager, with the offender, on a regular basis, and updated as programs are completed and goals are achieved. It is also important to note that Indiana's *Transition from Prison to Community Initiative* is implemented through a multi-agency partnership with common interests in improving the transition from incarceration into the communities.

As this study's results indicated, ex-offenders would encounter tremendous challenges in finding a job within a year of release. It is important that, upon release, community caseworkers meet regularly with participating offenders for the first year to identify any work related issues or needs. The caseworkers, along with IDWD, would also meet regularly with employers to discuss and address employer needs. Additionally, community case workers could offer support groups and classes geared toward cognitive behavior. This would help the ex-offenders acclimate to a new environment and learn to make appropriate decisions under different circumstances. Nonetheless, city officials and local community organizations need to work collaboratively with IDWD regional officials to create a comprehensive reentry program in order to enhance ex-offenders' employability in the urban community in the Indianapolis metropolitan area. In doing so, such efforts would reduce the recidivism rate among ex-offenders, which, in turn, would significantly reduce the financial cost for incarceration of re-offending ex-offenders.

Limitations

Limitations are obvious in this study. For example, the present researchers found that unemployment was the most influential predictor to recidivism, but this correlation between unemployment and recidivism might not exist if the definition of "employment" was subject to change due to a different economic structure and system. In other words, to further examine the relationship between unemployment and recidivism, there is a need to duplicate this empirical study in countries with a different economic structure than the United States of America. It is anticipated that this study's findings will extend our understanding of the issues of employment among released offenders returning to urban environments. Future research will need to further validate the correlation between unemployment and recidivism in a variety of economic structures and to extend our understanding how economic conditions, such as, unemployment within a unique social and economic context, would impact recidivism among released offenders.

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