A REFTUTION OF RACIAL DIFFERENTIALS IN THE JUVENILE RECIDIVISM RATE HYPOTHESIS†

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Abstract:

It has repeatedly been argued that race is an important predictor of juvenile recidivism, invariably with black offenders having significantly higher odds of recidivating than white offenders (DeComo, 1998; Strom, 2000; Benda, 2001; Langan & Levin, 2002; Harms, 2003; Pope and Snyder, 2003; Puzzanchera, 2003; Stahl, 2003). This study refutes that assertion. Using data from the Department of Public Safety and Corrections in the state of Louisiana, a total of 2,810 juvenile offenders released in the 1999/2000 fiscal year were examined and a socio-demographic profile of those who were returned into the correctional system one year post release was established. The results failed to show a

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statistically significant difference in the likelihood of recidivating between black offenders and white offenders, leading to a conclusion that race is not an important predictor of juvenile recidivism.

Background

One of the biggest challenges facing society today is the problem of juvenile offending. Nationwide, violent crimes are being committed by younger and younger persons and are even increasing among middle-class youth in suburban neighborhoods and communities (Durant, 1999:268). But the delinquency and recidivism of young offenders can be predicted and hence prevented. However, the methods most often used to do so conventionally derive from stereotypical conceptions, which often may not stand any scientific verification. The result is that they yield very low accuracy levels, only a little above chance. The best way to determine whether a particular characteristic is related to recidivism is to compare the recidivism rates of offenders with that characteristic (Hanson, 2000). Understanding juvenile recidivism is crucial for the development of effective policy responses to the broader ramifications of juvenile reoffense. Since a small proportion of offenders is responsible for a very large proportion of offenses (Farrington and West, 1993) there is need to address juvenile reoffending within the milieu of the specific factors that truly predict the reoffending behavior. The current juvenile justice system is imbued with operational and structural problems that necessitate a new type of risk assessment for
reoffending, which should be based on an updated profile of clients that frequent juvenile custody and supervision facilities. The goal of this study was to find out whether, all other things being equal, race would be a major determinant of the likelihood of juvenile recidivating.

**Review of Literature**

Recidivism is widely used to refer to reoffending within a specified period of time after release from a correctional facility. The duration taken between the time of discharge and reoffending is not constant, but has to be specified depending on the needs, constraints, or other circumstances of the research in question. In the current case, the recidivism of the study subjects was tracked for one year after release. The rationale for the decision to consider only one year was that almost 70% of all the recidivism in the first three years takes place within the first year (Langan & Levin, 2002:3). There are multiple methods of defining recidivism. Maltz (1984) identifies at least fourteen of them, with the most common ones being rearrest, reconviction, resentence, and any type of return to prison with or without a new sentence. Arrests and convictions have been the most widely used measures and the main reason for this is their relative ease of measurement because they require no active cooperation of subjects (Greenwood, et. al., 1993). However, some studies have used all four measurements in combinations (Klein & Caggiano, 1986; Langan & Levin, 2002). Whatever the measure that is chosen, it has been shown that recidivism is not a chance event, but can be predicted using certain variables (Klein & Caggiano, 1986; Florida Department of Corrections, 2001).
Juvenile justice policy-makers routinely make use of recidivism as the central means of evaluating rehabilitation programs (Piper & Warner, 1980/81; Maltz, 1984; Eottfredson & Tolry, 1987; Florida Department of Corrections, 2001; Sharkey, et al., 2003). This underscores the importance of establishing how individual socio-demographic characteristics, such as race, impact on recidivism so they can serve as a yardstick for measuring whether and how well intervention modalities perform in real situations, in order to avoid the raging conventional generalizations. According to Bridges and Steen (1998), stereotypes are an important factor in the common conception that blacks are more criminogenic and recidivate at a higher rate than whites. This view echoes earlier assertions by Peterson and Hagan (1984:67) that blacks and other minorities are seen, ipso facto, as more villainous and therefore as deserving of more severe penalties.

Although many studies do not control for these variables, there seems to be a general consensus in literature that there is a strong correlation between the pattern of offending and race, invariably showing a higher affinity to reoffending among the black offenders than among their white counterparts (Benda, 2001; Strom, 2000; Harms, 2003; Puzzanchera, 2003; Pope and Snyder, 2003; Stahl, 2003). In a study of three-year recidivism of 272,111 former inmates of prisons in fifteen states, Langan & Levin (2002) found that blacks were more likely than whites to recidivate irrespective of the measurement of recidivism used. Regarding the relationship between race and gender with respect to the rate of prevalence of juvenile custody, DeComo (1998) found that the rate of African American males was more than five times higher than the rate for
white males. DeComo also found that the rate for African American males was higher than the rate for males of any other race.

The trend remains the same not only at the level of recidivism, but also at the first act of offending (Strom, 2000; Harms, 2003). A study on predictors of racial arrest differentials showed that although blacks are arrested more often than whites, this may have something to do with the blacks’ higher susceptibility to be arrested because they are more likely to be participants in more serious types of crimes or offenses that warrant police responsiveness (Cureton, 2000). It has also been suggested that the belief by certain racial groups that the justice system is unfair may fuel criminogenic attitudes that are an important prerequisite in the decision to offend. For example, “blacks may turn to criminality or engage in more crime because of a perception that the criminal law and its enforcement are unfair and even racist” (Wilbanks, 1987:2; Cureton, 2000). Such beliefs are used to rationalize and justify delinquent and criminal behavior by maintaining that the affected persons are not actually offenders when they commit a crime but victims of an unjust system (Wilbanks, 1987). But despite the barrage of research outcomes that support the view that blacks are more susceptible to recidivating than whites, on rare occasions a conclusion of no statistically significant difference between the two races with respect to the likelihood of reoffending has been made. For example, in a study of psychosocial variables associated with recidivism, Katsiyannis, et al., (2004) found no difference between recidivists and nonrecidivists with regard to race. The findings of this study corroborate this latter view.
Data

Two sets of data were identified and obtained from the Office of Youth Development (OYD) in the Department of Public Safety and Corrections in Louisiana. The first set consisted of five data files, which OYD identified as Juvenile Information Records Management System (JIRMS). These included (a) Demographic file that contained information pertaining to date of birth, race, gender, and home parish for each youth released from state custody/supervision during the 1999/2000 fiscal year; (b) Transfer file, which contained details of the physical location of placement for individual cases, transfer dates, type of commitment, screening score, and the facility exit outcome; (c) Petition and offense history file, which had information pertinent to the petition dates, offense histories, current offense type, date of adjudication, and disposition type; (d) Referral information file that contained such information as the referral source, referral date, referral statute, and the referral sequence for every release made during the specified period; and (e) Risk and needs assessment file, which had the assessment scores for various risks and needs domains.

The second set comprised the convictions that resulted in adult placement, which the Office of Youth Development identifies as Corrections Adult Justice Uniform Network (CAJUN). It was important to use this dataset because some juvenile offenders were sentenced as adults, depending on the seriousness of the committed offense, and were thus traced to this set. These two datasets were merged using social security numbers as common identifiers and case identification numbers, both of which were later replaced with
a set of unrelated cataloging in order to conceal the identity of the persons involved. The consolidated dataset was then comprehensively cleaned up for any “wild punches” – recording or coding errors – and any major case omissions that could render case entries incomplete. In the end, there were 919 releases from non-secure treatment facilities, 572 from secure short-term modalities, and 1,319 from secure regular confinement. There were 2,810 releases in all. In a few cases some offenders would exit one program to another, meaning that not all exits from a program amounted to release. In the study, only final releases into the community were considered.

**Intervention Modality Types**

The Department of Public Safety and Corrections in the state of Louisiana runs three major juvenile intervention and treatment modalities. These are:

- **Non-secure/community-based programs**: These programs are basically under the supervision of the Division of Youth Services, and they oversee non-custodial intervention programs. They include therapeutic foster care, group treatment homes, half-way houses/independent living homes, foster homes, staff secure homes, the family preservation program, day treatment programs, emergency shelter care service, and other contracted residential facilities.
- **Secure short-term programs**: These are variously referred to as shock incarceration or boot camps, and they typically take three to four months, which
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involve strict, military-like programs characterized by absolute and unquestionable obedience to correctional orders. Two facilities used by the Office of Youth Development for offering secure short-term intervention are, (a) Bridge City Correctional Center for Youth (BCCY), which is located in Bridge City along the banks of Mississippi River in Jefferson Parish. This is a secure correctional facility for male juveniles who are adjudicated with delinquent offenses and found to deserve a custodial placement. The facility runs not only short-term secure custody, but also secure regular treatment for elongated confinement of male offenders. (b) Swanson Correctional Center for Youth (SCCY) in Monroe. This, like BCCY, also doubles up as a secure short-term and secure regular custody for male juvenile offenders. In addition, SCCY operates a program for offenders with serious mental illnesses, as well as vocational educational opportunities in diverse areas.

- Secure regular programs: These involve intervention in a secure confinement for any period of time beyond four months. The criteria for placing juveniles into secure regular programs depend on a variety of factors, including offense type, offense history, family background, health status, and other needs and risk factors, all of which collectively gave rise to one value, termed the screening score and assigned by the Office of Youth Development.
In this study, all the three modality types used by the state of Louisiana were taken into account, and the analysis of racial differentials in recidivism was conducted at each of the three levels. The objective – to find out whether, ceteris paribus, race is a significant factor in juvenile recidivism – was therefore sought for all three intervention and treatment modality types.

Methods

According to the Juvenile Information Records Management System’s (JIRMS) demographic file, the race variable was categorized into fifteen groups, namely, Aleuts, Alaskan natives, Asian American, American Indian, Black, Oriental, Cambodians, Mixed, Pacific Islanders, Polynesians, Puerto Ricans, Vietnamese, White, Spanish/Latin American, and “other”. An inspection of the frequency distribution across these racial groups revealed that most of them had either extremely few cases or no cases at all, while a concentration of cases was found for “Black” and “White” categories. Aside from this numerical line of argument, since the main interest in this study was the Black-White differentials in recidivism, only Black and White racial groups were considered, and the race variable was recoded into two categories as “Black=1”, or “White=0”.

The null hypothesis tested in the study was that, ceteris paribus, black offenders do not differ from white offenders in the likelihood of recidivating. This hypothesis was tested for each of the three treatment modalities, using the Baysian Information Criterion (BIC) derived through logistic regression analyses (Pampel,
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2000:30-31). BIC is obtained as the squared Wald ($Z^2$) minus the natural logarithm of the sample size ($ln\ n$), and Wald is the ratio of the logit coefficient of $x_1$ to the standard error of $x_1$. The choice of logistic regression as the most ideal method of analyzing data in this study was justified on one major front, that is, it converts the probabilities based on a dichotomous dependent variable into logged odds that signify an underlying continuous variable. With recidivism as the dependent variable, the logistic regression model would take the following form: $ln(p/1-p) = f(x)$, where $p$ is the conditional probability of recidivating given a specific value of the descriptive variable $x$, in this case, given that a respondent is black; and $p/1-p$ is the odds of recidivating given that a respondent is black.

The essence of a logistic regression analysis is that BIC should exceed zero for the effect of the predictor variable on the dependent variable to be significant (Pampel, 2000). The general BIC decision rule is that if $Z^2 > ln\ n$, $H_0$ should be rejected, whereby a BIC value of between 0 and 2 is defined as weak; 2 to 6 as positive; 6 to 10 as strong; and beyond 10 as very strong (Pampel, 2000). It is recognized that these BIC categories are not mutually exclusive, but they are nonetheless adopted in this study because of their centrality in measuring the strength of association.

The natural logarithms of the three sample sizes for this study were $ln\ 919 = 6.823$ for non-secure modality; $ln\ 572 = 6.349$ for secure short-term, and $ln\ 1,319 = 7.185$ for the secure regular type.
Analysis

To test the null hypothesis of no relationship between race and juvenile recidivism, logistic regression models were ran separately for each of the three modality types. Partial results from each of the three models are presented alongside each other – for expediency purposes – in the following table.

**Logistic Regression Results for the Three Modality Types**

<table>
<thead>
<tr>
<th>Modality type</th>
<th>B</th>
<th>S.E.</th>
<th>Z² (Wald)²</th>
<th>BIC= Z²−lnn</th>
<th>Sig</th>
<th>Exp(B)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Non-secure</td>
<td>.117</td>
<td>.246</td>
<td>.224</td>
<td>-6.599</td>
<td>.636</td>
<td>.890</td>
</tr>
<tr>
<td>Secure regular</td>
<td>.239</td>
<td>.213</td>
<td>1.259</td>
<td>-5.926</td>
<td>.262</td>
<td>.788</td>
</tr>
</tbody>
</table>

In the non-secure modality type, the logit coefficient was .117. Recall that race was recoded into two categories as “Black=1”, and “White=0”. Thus this logit coefficient means that holding all other factors constant, the logged odds of recidivating are .117 times higher for black offenders than for white offenders. The exponentiated coefficient for race in this modality type is .890, which means that the odds of recidivating are only 11% higher for black offenders than for white offenders. However, there is a high probability of .636 that a Z² of .224 or higher would occur if the null hypothesis were true. Due to this significance level, and because the ultimate test of significance, the BIC value, falls below zero, the null hypothesis that all things being equal, there is no
relationship between race and recidivism in the non-secure treatment modality cannot be rejected.

The effect of race on juvenile recidivism was also tested in the secure short-term modality type. According to the regression results in the above table, the logit coefficient for this treatment modality type was .534. This means that everything else being equal, the logged odds of recidivating are .534 times higher for black offenders than for white offenders. But there is a probability of .071 that a $Z^2$ of 3.271 or higher would occur even with a true null hypothesis of no relationship between race and the likelihood of recidivating. Besides, the BIC value falls below zero, a result that does not allow for the rejection of the null hypothesis.

In the secure regular treatment modality, the logistic regression results showed a logit coefficient of .239, which means that the logged odds of recidivating are .239 times higher for the black offenders than for the white offenders. But the significance column shows a probability of .262 that a $Z^2$ of 1.259 or higher would still occur even with a true null hypothesis. In addition, the BIC value for race in this modality type, like the other types, is negative, a finding that again fails to provide the basis for the rejection of the null hypothesis that, all things being equal, there is no relationship between race and recidivism.

Arising from the logistic regression results of the three models, it is concluded that race is not an important predictor of juvenile recidivism.
Summary, Limitations, and Way Forward

In this study, the effect of race on juvenile recidivism was tested. Logistic regression models were ran for each of the non-secure, secure short-run, and secure regular intervention and treatment modalities employed by the Department of Public Safety and Correction of the state of Louisiana. The research hypothesis tested was that, ceteris paribus, there is no statistical relationship between race and the likelihood of recidivating among juvenile offenders. In none of the three modalities was the effect of race on recidivism found to be statistically significant. It was concluded that race is not an important predictor of recidivism among juvenile offenders.

Because this finding is a major discovery that demystifies the conventional conceptions of a typical offender, it might call for a reflection on the part of stakeholders in the juvenile justice system, nay, in the entire criminal justice system, because juvenile offenders eventually grow into adult criminals. Such a reflection would help to accurately redirect resources pertinent to such important areas of the justice system as police surveillance and neighborhood patrol.

Since “the only perfect research is no research” Hagan (2003:271), two limitations are acknowledged in this study. First, recidivism was tracked for only one year. Although this does not necessarily adversely affect the general findings given that almost 70% of all the recidivism of the first three years takes place within the first year (Langan & Levin, 2002:3), it is recognized that a longer period of follow up might see the recidivism level go up. But
excessively long periods of tracking recidivism may capture reoffending that is not essentially related to the initial act of offending. Second, in a few isolated cases, some juvenile offenders had been sentenced as adults and placed in adult correctional facilities. Such juveniles could not be captured for this study. Similarly, some releases might have relocated to other states, and whether or not they committed further offenses there a year post release could not be established. Such cases might in some way have affected the findings of the study, but such effect is believed to be nominal.

Finally, it is acknowledged that an interstate comparison of levels of juvenile recidivism and the concomitant factors associated with reoffending in each region might help surmount the problem of generalization, since there is a great deal of variation in the cultural and socio-demographic characteristics across the entire United States. In other words, a replication of this study in different states and in various modality types that might exist in other states is recommended.

References


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