Risk Assessment Tools and Racial/Ethnic Disparities in the Juvenile Justice System

Lori D. Moore and Irene Padavic*
Department of Sociology, Florida State University

Abstract
This paper addresses the possible consequences for racial and ethnic disparities of the growing reliance on risk assessment tools for sentencing in juvenile justice systems. These tools consider both legal factors (i.e. criminal history) and personal background factors (e.g. household composition, parents’ arrest history, the youth’s mental health, attitudes, school status, and current employment status) to predict the likelihood of recidivism, which then informs punishment decisions. Because they decontextualize race, the associations between race and risk factors linked to race could possibly create higher risk scores and harsher punishments for minority youth.

The juvenile justice system is marked by racial and ethnic disparities, and understanding the causes and mitigating the problem has proven difficult for researchers and for juvenile justice system officials. Disparities continue to appear in every stage of the juvenile justice process, a problem that defies both legislation aimed at reducing disproportionate minority contact and the rehabilitative intent of the system (Engen et al. 2002; Pope et al. 2002; Snyder and Sickmund 2006, 176). Understanding how racial/ethnic disparities occur in the juvenile justice system could help policy makers and juvenile justice professionals implement plans to reduce them. In this paper we consider the potential of one widespread practice – the use of risk assessments – to undermine or exacerbate inequality-creating processes in the juvenile justice system.

The use of quantitative, questionnaire-based risk assessment instruments has been a trend over the past two decades in the juvenile justice system (Griffin and Bozynski 2003). These are questionnaires typically administered shortly after an arrest that indicate a youth’s answers to anywhere from a few questions to upwards of a few hundred, depending on the instrument. Questions assess the young person’s prior history in the system, along with personal background (e.g. household composition, parents’ arrest history, the youth’s mental health, attitudes, drug and alcohol use and history, school status, current employment status). Answers are tabulated, and the youth is assigned a risk score or risk category that officials use to sort offenders into treatment plans. Broad disposition options, in order of severity, typically consist of diversion, probation, confinement, and transfers to adult court, but these simplified categories hide the wide range of individualized treatment plans within each category, which can run into the thousands. Risk assessment instruments are intended to assess an offender’s potential risk of recidivism using actuarial science, to sort offenders into risk classifications, and to aid in the treatment decision-making process (although mismatches between treatment plan recommendations and resources have been a problem in many jurisdictions; Hoytt et al. 2002; Mulvey and Iselin 2008; Rogers 2000). This paper discusses the role these instruments play in either reducing or exacerbating racial disparities.
According to one perspective, risk assessment instruments have the potential to reduce racial/ethnic disparities because they provide a uniform way to assess offenders without wholly relying on decision-makers’ assessments, which might be influenced by bias. Risk assessments, according to this argument, sort offenders into risk categories (based on their likelihood of reoffending), regardless of race/ethnicity, which could reduce disparities in sentencing. According to Schwalbe et al.:

Risk assessment instruments should correctly classify offenders across diverse demographic groups.... Under ideal conditions, group differences in rates of reoffending should be accounted for by differences in the proportions of juveniles classified into lower and higher risk categories (2006, 307).

A meta-analysis of risk assessment instruments (Schwalbe 2007) found that, on average, they accurately predicted recidivism, although the study did not explicitly examine their ability to accurately predict recidivism across racial/ethnic groups.

In contrast, some scholars have argued that risk assessment instruments have the potential to exacerbate disparities because race and ethnicity predict some of the items, indirectly placing racial-ethnic minorities at greater risk of harsh punishment (e.g. Hoytt et al. 2002; Moore 1986; Mulvey and Iselin 2008; Muncie 2006). Another criticism is that the use of such instruments is less about rehabilitation and more about the efficient identification of high-risk offenders for purposes of managing them, a perspective consistent with the actuarial approach of the ‘new penology’ (Feeley and Simon 1992; Kempf-Leonard and Peterson 2000). This high-risk group tends to be made up of the marginalized urban underclass, and particularly young, inner-city minority boys and men. Thus, according to this theory, risk assessments would allow management of the urban underclass by identifying it as a criminal risk and warehousing it in jails, prisons, and boot camps in order to minimize its threat to the social order (Feeley and Simon 1992:456).

This manuscript has several aims. After offering a brief history of race and ethnicity in the juvenile justice system, we turn to descriptions of historical and contemporary risk classification systems and discuss their possible effect on inequalities. We caution that because they decontextualize race, the associations between race and risk factors linked to race could possibly create higher risk scores and harsher punishments for minority youth. We then address findings of recidivism studies and conclude that further research is needed to assess the potential of such instruments for perpetuating or undermining juvenile justice disparities between minority and white offenders.

**Historical overview of racial/ethnic disparities in the juvenile justice system**

Rehabilitation is the cornerstone of the juvenile justice system. The ‘Child Savers’ of the late 1800s and early 1900s envisioned a court that takes into account the youthfulness and individual circumstances of offenders and provides rehabilitation. As Tanenhaus (2004) described, however, rather than rehabilititating all troubled youth, the juvenile justice system may have created a still-existing color line whereby White youth receive rehabilitation and minority youth (especially Black) are subjected to punishment and social control. In early 20th century in Chicago, for example, he shows how scarce probation services were withheld from troubled Black youth and diverted to troubled white youth, as were admissions to private welfare institutions. Due to limited rehabilitation options for Black youth, juvenile court officials were forced to hand down harsher sentences (e.g. send Black offenders to homes for serious delinquents). Pisciotta (1983) documented how in Pennsylvania, Black youth were excluded from reformatories and housed
in adult jails until a separate ‘colored’ reformatory could be built, and how rehabilitation for Whites entailed a basic education and training for farming or skilled-artisan occupations, whereas for Blacks it entailed no education and training for only manual labor. This history of differential rehabilitation treatment continues in today’s juvenile justice system, with minority youth disproportionately coming into contact with or receiving harsher punishment in the juvenile justice system (Engen et al. 2002; Pope et al. 2002).

Scholars have argued that the climate surrounding the juvenile justice system in recent years has become less rehabilitative and more punitive, especially towards minority offenders. Despite Civil Rights-era successes in desegregating juvenile facilities (Ward and Kupchik 2009, 88) and increasing black representation among juvenile justice authorities (Ward et al. 2011, 161), the ‘Get Tough on Crime’ era beginning in the 1970s not only created a more punitive juvenile justice system but also increased minority overrepresentation in the juvenile justice system and racial disparities in disposition (Ghetti and Redlich 2001; Mears and Field 2000). A key component of the toughness climate is the prosecution of youth as adults, and by the 21st century most states had created mechanisms that facilitated and expanded the use of transfers to criminal court (Bishop 2000; Kupchik 2006:1; Myers 2005; see Zimring and Fagan 2000 for a review), with the result that between 20 and 25 percent of juvenile offenders were tried as adults annually (Bishop 2000, 97). The effect on minorities of the get-tough movement has been disproportionate, as the changes have affected them more adversely than whites (Feld et al. 2005).

The role of race in risk assessment and management, 19th century to the present

Attempts to measure and manage risky youth are not new, and early attempts were rooted in racist ideology. In 1876, for example, Cesare Lombroso published Criminal Man, based on 66 autopsies of Italian delinquent boys whose skull structure he claimed was similar to those of the worst Italian criminals, people of Mongolian decent, and US blacks (Beirne and Messerschmidt 2006, 278). As the eugenics movement took hold in the United States around the turn of the century, state laws were passed allowing forced sterilization of girls and women assessed as habitual criminals (Winfree and Abadinsky 2010), disproportionately affecting racial- and ethnic-minority girls and women (Stern 2005). Intelligence testing gained popularity in the early 20th century, including in California, where the test scores of reformatory boys on puzzle- and quiz-based exams categorized them as feebleminded, borderline feebleminded, dull normal, normal, or superior, with whites ranked most intelligent, followed by blacks, with Mexican-descent youth ranked the most mentally deficient (Chavez-Garcia 2007, 212). Considerations that might temper such conclusions, such as unequal access to education or test administration only in English, were not raised, and score differences were touted as a direct result of inferior heredity and were used to determine differential rehabilitation plans.

The modern risk-assessment paradigm that arose in the 1990s is used by almost 90 percent of jurisdictions today (Schwalbe 2008), and although race/ethnicity does not explicitly inform risk classification as it did in earlier times, some scholars and policy makers fear that modern instruments nevertheless place certain racial/ethnic groups in higher risk categories (e.g. Annie E. Casey Foundation, 2006; Hoytt et al. 2002; Schwalbe et al. 2007). If items on risk-assessment instruments measure risk as deviations from the social, cultural, or structural experiences of white youth, they note, then the rating process would result in white privilege (McIntosh 1989) and minority disadvantage. Questions
about the youth’s family life, school status, and other attributes, such as area of residence, may affect both recidivism and be more closely associated with some racial groups than others. Family, for example, is a racialized institution in that the two-parent configuration is more common among Whites and Asians than among African-Americans and Hispanics. Since scoring penalizes youth from single-parent homes, Whites and Asians will score as lower recidivism risks than members of the latter groups, resulting in different punishment outcomes. Locale is another factor that on its face lacks a racial component but that may disproportionately affect minorities’ punishment severity. This possibility arises because the communities where racial/ethnic-minority youth often live put them at a disadvantage in risk assessments. For example, living in a minority-dominated, economically depressed residential area would mean minority youth have few employment opportunities (a protective factor in assessment tools) and would be more likely than Whites to attend schools characterized by higher dropout rates and gang activity (risk factors in assessment tools; Brown 2007). Thus, a policy of using risk assessment instruments in disposition decisions might indirectly disadvantage Black and Hispanic youth.

Some scholars suggest that a possible solution may lie in using caution in designing questionnaires to ensure that they do not “give undue weight to social factors that increase the likelihood that minority youth will be detained more often than white youth” (Cabaniss et al. 2007). For example, an alternative to the risk factor ‘good family structure’ is an item asking if an adult is responsible for caring for the youth or willing to accompany the youth in court (Cabaniss et al. 2007; Hoytt et al. 2002). Such wording may not remedy the problem, however. Which racial groups are least likely to have a parent with the work-hours flexibility that allows them to appear in court? Or, in regard to items that consider afterschool employment as a protective factor, which teen racial groups are least likely to hold afterschool employment? As the example of the locale of a youth’s residence indicated, if the answer to these questions is ‘racial minorities’, then bias has crept in.

**Implications for bias-reduction**

Studies examining reasons behind disproportionate minority contact and differential sentencing point to the possibility of discrimination throughout the process, stereotyping, and institutional discrimination. We address each in turn, indicating how the use of risk assessment instruments might affect the outcome.

The juvenile justice system is comprised of a series of decision points, where decisions are made about the youth at each stage of the process, and the effects can accumulate. The effect of a decision to detain a youth pre-trial, for example, can continue to affect the youth’s outcome later in the process. Some research has found that minority juvenile offenders were overrepresented at every stage of the process (Bishop and Frazier 1996; Leiber 2002), and other research has found that overrepresentation depends on the particular stage in the judicial process (Leiber and Mack 2003). One study of three counties in Texas, for example, found that in the pre-adjudication, adjudication, and disposition stages, Black but not Latino/a offenders were overrepresented vis-à-vis White offenders (Rodney and Tachia 2004). Another study of counties in a northeastern state found that Latino/a youth were detained after arrest more often than Blacks, who were detained more often than Whites (Armstrong and Rodriguez 2005). Yet another, this one of a court in a southeastern county, found that Black youth received diversion less often than Whites but were more likely to be released at the intake process (Leiber and Blowers 2003). Research on transfers to adult court also provide mixed results, with some studies...
finding that Black youth were treated less harshly than their White counterparts, for example as in a county in Texas (Mears and Field 2000), and others finding Black and Latino/a youth more likely than Whites to be transferred to adult court, as was found in a California study (Males and Macallair 2000). In sum, research shows that racial/ethnic disparities can occur at multiple stages in the process and that they do not always favor Whites. Risk assessment instruments have the potential to eliminate possible discrimination in the sentencing process by standardizing the process of evaluating offenders. Alternatively, if the instrument contains items that would cause minorities to consistently be processed more harshly, their use would standardize their harsher treatment.

Stereotyping is a key mechanism by which bias can enter the system. Experiment-based research has shown that because they often must make quick decisions with incomplete information, decision-makers rely on automatic or implicit associations between certain races and cultural stereotypes about criminality to fill in the blanks, resulting in harsher punishment for minorities and less-harsh punishment for Whites (Graham and Lowery 2004). Field research, too, has also shown the power of stereotyping. One study (Bridges and Steen 1998), for example, based on 233 narratives from probation officers in the western United States, found that they held negative attributions about Black youthful offenders, whom they stereotyped as lacking respect for the law and holding bad attitudes, attributes they described as stemming from character flaws. In contrast, they attributed White juvenile offending to family structure or delinquent peers, elements outside of individual character. The researchers concluded that probation officers’ stereotypes about the causes of offending influenced their recommendations, making them more likely to endorse harsher sentences for Black than for White offenders. Other studies have found that court officials make negative attributions about minority youth’s sense of remorse (Bishop and Frazier 1996; Leiber 1994), family structure (Kempf-Leonard et al. 1990), and school status (Bridges et al. 1993). In sum, relying on stereotypes to fill in information unknown to decision-makers appears to contribute to racial/ethnic discrimination in the juvenile justice system. The use of risk assessment instruments could short-circuit this tendency, since the risk assessment score replaces suppositions with facts and reduces decision-making discretion, providing no room for race-based stereotypes to enter decisions. If, however, stereotypes inform the questionnaire items, then the instruments would have little effect in undermining stereotyping’s role in sentencing. There is also the possibility that restricting decision-makers to only the facts provided by risk assessment tools undermines their ability to consider stereotype-disconfirming information in sentencing (e.g. a minority youth might live in a single-parent household, but that parent might be dedicated and committed, a stereotype-disconfirming fact that sole reliance on assessment instruments would render unavailable to the decision-maker).

Another mechanism researchers have implicated in the discriminatory treatment of minorities is institutional discrimination, which is the unintended consequence of institutional practices, policies or structures that favor the experiences or attributes of majority group members over those of minority group members (Feagin 1989, 14–5). One study of juvenile offenders in Florida (Bishop and Frazier 1996) found that minority youth were disadvantaged relative to Whites because their families lacked equal access to transportation, to time off work, or to telephones, making it difficult for them to help their children during the process. In this case, social institutions and policies unrelated to the juvenile justice institution (e.g. the public transportation system, employment policies) placed minority groups in disadvantaged positions. The juvenile justice system itself has structures, practices and policies that may create or dismantle institutional discrimination, and the use of risk assessment tools is one such policy that may reduce racial-ethnic
disparities by standardizing the process of evaluating offenders. An alternative possibility is that a non-racially neutral risk assessment tool could incorporate such disadvantages into the instrument, thereby perpetuating institutional discrimination.

**Risk assessment instruments’ accuracy in predicting recidivism for racial/ethnic groups**

Studies assessing the predictive validity of these assessments tend to find high predictive validity for all racial groups, although this claim is mitigated when interactions with gender are considered. Regarding the main point, a study of Florida’s juvenile offender population found that the Positive Achievement Change Tool (PACT) predicted recidivism equally well for minorities and non-minorities (i.e. youth classified as at risk of reoffending tended to do so and those classified as not at risk tended to not re-offend; Baglivio 2008). Similarly, researchers found that Ohio’s Global Risk Assessment Device (GRAD) accurately predicted recidivism in a sample of Black and White juvenile first-time misdemeanor offenders (Gavazzi et al. 2008). Studies examining gender in conjunction with race/ethnicity, however, tell a more complex story. A study of the North Carolina assessment tool found that it better predicted recidivism for Whites than for Blacks (Schwalbe et al. 2004), but a later study showed that its predictive validity depended on the interaction of gender and race, such that it failed to accurately predict recidivism for white girls (Schwalbe et al. 2006; see also Baglivio 2009 for similar analyses of Florida data). So, while in general the instruments predict recidivism equally well for people of color and Whites (Schwalbe 2008), gender complicates the picture, and researchers should be alert to the possibility of interaction effects (see Moore and Padavic 2010).

**Conclusion**

New penology scholars argue that the criminal and juvenile justice systems are moving away from rehabilitation as a goal, because of its expense, and moving towards the use of actuarial science in order to cost-effectively identify and warehouse an aggregate group of offenders. If that is the case, how might such a process create racial disparities? While instruments no longer explicitly use race or ethnicity as risk factors – indeed, the use of racial/ethnic group as a risk factor is enjoined – if some items correlate with race or ethnicity, then minorities will be overrepresented in the high-risk group and more likely than White youth to be warehoused, thus increasing disparities. By the same logic, costly rehabilitation – to the extent that it is available to anyone, given limited budgets – would be reserved for the low-risk group, where minorities are likely to be underrepresented.

In recent years, sociologists have been warning of the danger of an approach to social ills that presumes that racial or ethnic status is no longer determinative of life outcomes (Bonilla-Silva 2003; Feagin 2006). According to the American Sociological Association (2003):

> Those who favor ignoring race as an explicit administrative matter, in the hope that it will cease to exist as a social concept, ignore the weight of a vast body of sociological research that shows that racial hierarchies are embedded in the routine practices of social groups and institutions [emphasis added].

The embedded nature of race is what causes a potential problem with risk assessment instruments. Because the instruments decontextualize race, the associations between race and the risk factors linked to race (e.g. family characteristics, neighborhood residence,
gang affiliation, school activities, parents’ criminal history) are rendered invisible and can lead to higher risk scores – and hence harsher punishments – for minority youth and to lower risk scores and less-harsh punishments for White youth.

Suggestions for future research

There are several areas in need of further research. First, more research is needed to uncover whether risk assessment instruments introduce racial bias and if so how. Are racial and ethnic minorities categorized by the instrument as more risky than Whites? If so, researchers should examine individual assessment items for potential bias. Second, recidivism studies seem to validate the use of actuarial science without addressing sentencing or rehabilitation. Does the use of such instruments result in harsher juvenile sentences and/or in different access to rehabilitation plans for racial/ethnic minorities?

Third, we know little about the administration of such instruments and whether they present an opportunity for bias or stereotypes to intrude during the interview process. Do interviewers ask all questions of all interviewees or do they make assumptions for some racial groups? How do they deal with non-responsiveness or refusals to answer certain questions, and do they treat minority and non-minority youth similarly in such situations? Do race-conscious interviewer-training procedures produce different scores from race-neutral training? Does race-matching of interviewer and interviewee affect results? Fourth, we encourage further research unpacking intersectionalities. It is impossible to understand how race and ethnicity operate without examining how they may operate differently for the sexes.

Finally, more research is needed about how risk assessment instruments sort offenders beyond Black–White and minority–nonminority comparisons. It would be particularly interesting to see Latino/a–White comparisons, given that Latinos/as are the largest and fastest-growing minority group in the United States, representing 16 percent of the population (U.S. Census Bureau 2010).

Short Biographies

Lori Moore received her PhD in Sociology in 2011 from Florida State University. Her research focuses on inequality in the juvenile justice system. She has co-authored a paper appearing in Feminist Criminology that uses intersectionality theory to examine racial and ethnic disparities among girls in Florida’s juvenile justice system. Her teaching includes Introductory Sociology, Social Statistics, and Crime and Society. She received her bachelor’s and master’s degrees from Florida State University.

Irene Padavic is Pepper Professor of Sociology at Florida State University. Her research interests primarily lie in the areas of gender and race workplace inequality, feminism, and families. She has published recent articles on these topics in Organization Studies, Gender & Society, Academy of Management Review, Sex Roles, and Symbolic Interaction, and she wrote two editions of a book, Women and Men at Work, with Barbara Reskin. Her teaching includes courses on inequalities, on race and gender in organizations, and on family history. She is currently working on papers about the gender glass ceiling. Dr. Padavic received her bachelors’ degree from Smith College and her PhD from the University of Michigan, and was a Radcliffe fellow at Harvard University.

Note

* Correspondence address: Irene Padavic, Bellamy Building, Tallahassee, FL 32306–2270, USA. E-mail: ipadavic@fsu.edu
References


