Published in final edited form as:

Race Soc Probl. 2009 December 11; 1(4): 218–230. doi:10.1007/s12552-009-9018-y.

Racial Disparities in Early Criminal Justice Involvement

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Abstract

Criminologists have long reported the existence of racial disparity in the criminal justice system, but the important question is why. While some argue that observed differences are a consequence of more criminal behavior among minorities, the weight of the evidence indicates that this is but a partial explanation. In this paper we study data from a sample of juveniles to examine how racial differences in early police contact, and important social environments—family, school, and neighborhoods—affect later contact and arrests, controlling for self-reported delinquency. We find that early (in middle school) contact with police is an important predictor of later (high school) arrests. Also we found that, in addition to being male and living in a low-income family, children who have parents who have a history of arrest, who have experienced school disciplinary actions, who have delinquent peers, and who are in networks with deviant adults are more likely to have problems with law enforcement. These factors help to explain racial differences in police contacts and arrests.

Keywords

Race disparity; Police contacts; Environment

It is quite possible that police officers believe that they are helping a child when they engage, counsel, or warn young people without arresting them. Indeed, part of the image of community policing is that officers get to know the people in the neighborhoods where they patrol, allowing them to have a good idea about potential problems. Knowing which juveniles tend to get in trouble, or where problems frequently occur allows officers to intervene early. But another possibility also exists. Labeling theorists, decades ago, warned us of potential problems arising from contacts with agents of social control. It may be that, under some circumstances, even though many officers may intend to do a good thing, they may actually be exacerbating problems with early intervention. One such circumstance is when police contact occurs where there is a narrative of injustice; e.g., “police pick on people from this neighborhood,” or “police are out to hassle young men,” or “police in this community use racial profiling.” In many cities, the relationship between police and the Black community is particularly toxic. Findings indicate that African American juveniles are, independent of self-reported involvement in delinquency, more likely to have had police contact by eighth grade (Crutchfield, Skinner, Haggerty, McGlynn, & Catalano, under review). Some racial differences in social environments explain this disparity. We address two questions related to racial disparities in early police contacts and arrests. First, do juveniles’ earlier social experiences and environments lead to racial differences in police

contacts? Second, do these racial differences in police contacts increase or decrease the chances of later arrest for African Americans? In this paper we will address this first question and related issues—are there racial differences in police contacts and arrests for young people early in high school, can these differences be accounted for by racial differences in delinquent behavior, and which, if any, features of juveniles' social environments explain observed racial differences.

Criminologists have studied racial differences in criminal justice experiences for a considerable amount of time. Studies vary in reporting how much racial disparity exists and the proportion of observed differences that can be attributed to legally relevant variables, e.g., criminal involvement, offense seriousness, offenders' criminal histories. In our previous work (Crutchfield, Skinner, Haggerty, McGlynn, & Catalano, under review) we found that self-reported delinquency did not explain observed racial differences in police contacts with middle school students. The popular answer used to explain findings such as ours is "discrimination" on the part of police, prosecutors, and judges. Unfortunately, most studies, including ours can assess neither discrimination nor racism on the part of criminal justice actors. Not surprisingly, officials generally do not reveal on questionnaires or in interviews that they are prejudiced. Laboratory studies of implicit bias (Greenwald, Oakes, & Hoffman, 2003) can measure unconscious reactions to the race of individuals by studying physiological changes produced by controlled stimuli, but this method does not allow us to definitively draw conclusions about discriminatory attitudes or behaviors in the field. So, discrimination remains but an interpretation of legally unexplained racial differences in criminal justice decisions, likely beyond currently available measurement methods.

What we hypothesized, and could measure were race differences in the social environments that young African Americans and Whites experience. The former generally live, go to school, and work where there is greater police presence, and where there is more surveillance. As a result, we argued that Black youth would be more likely to come to the attention of the police. This is consistent with Krivo and Peterson (1996) who report that racial residential segregation consigns African Americans to neighborhoods where they are more likely to experience criminal victimization. To the extent that police departments focus patrols where there is more crime, Black citizens are at greater risk of encounters with police.

We found in separate earlier analyses that the odds of having a police contact by 8th grade were increased by having a parent with a history of juvenile delinquency, having a sibling involved in criminal activity, higher observed reward for negative behavior in the home, having delinquent peers, having school discipline problems, and knowing adults who engaged in substance abuse or criminal behavior. Higher levels of police contacts among Black middle school students were partially attributable to more school disciplinary events.

In this paper we will examine these same important environments (family, peers, school, neighborhood), when the students in the sample were in the eighth grade (time one) to assess the extent to which these environments increase the likelihood that young African Americans are more likely to have police contacts and arrests than Whites in subsequent years (10th grade). To what extent are contacts (a necessary prerequisite for arrest) a function of criminal behavior? Does race make a difference independent of behavior? We look at the impact of family, peer, school, and neighborhood environments on the probability of arrests after taking into account earlier police contacts. If race makes a difference, do Blacks have behavioral characteristics or live in social environments that are associated with or that predict contact or arrest? We are interested in how racial differences in social environments may differentially lead to interactions with law enforcement. In this paper we are especially interested in how the experience of early police contacts affects later

experiences with police after other individual characteristics and environmental differences are taken into account. Our study is of a sample of Black and White adolescents in one western city, Seattle Washington.

We focus on early adolescents and their contacts with police because we are interested in race disparities in early contact with the criminal justice system, before the establishment of a regular pattern of arrest and detention. Labeling theorists have convinced us of the formative influence of interactions with agents of social control. This is a study of 10th graders whose ages range from 14 to 17 years. Some of them have gotten in trouble in school and the community, but because of their youth they have not yet had much opportunity to truly develop deviant careers.

RACIAL DISPARITIES IN CRIME AND CRIMINAL JUSTICE

Much of the extant literature on criminal justice racial disparities seeks to distinguish between warranted (e.g., explainable by higher levels of criminal involvement) and unwarranted (not explainable by legally relevant variables) differences between Blacks and Whites. By comparing racial differences in arrests for violent crime (those most likely to bring about sanctioning) to variations in prosecution, sentencing, or imprisonment, criminologists have evaluated the “justness” of racial differences in criminal justice processing. But how reasonable is this approach? Do arrest rates fairly represent racial differences in criminal or delinquency involvement? Self-reports are not necessarily better for this purpose because they tend to be dominated by less serious violations, but on the other hand they are not subject to the same biases as the criminal justice practices that are being predicted; which is the case for arrest data. While perhaps not superior, using self-reported delinquency data to study racial disparities in the justice system does add to our understanding of this important topic.

Much of the research on race disparities in recent decades has focused on adult sentencing and imprisonment (Blumstein, 1982; Bridges, Crutchfield, & Simpson, 1987; Crutchfield, Bridges, & Pitchford, 1994; Kleck, 1981). More recently though, a growing literature on racial differences in how juveniles experience different states of the justice system has appeared (Harris, 2009; Huizinga et al., 2007; Kirk, 2008; Leiber & Mack, 2003; Poe-Yamagata & Jones, 2000).

Offenders, including juveniles, are arrested because they do something wrong. People have contact with police because of their suspicious behavior or because they are in places where they probably should not be. Though some people concur with such statements (Wilbanks, 1987), research results have long shown that it is not so simple. For nearly 40 years, criminologists have periodically explored the factors which lead police to make an arrest once they have made contact with suspects. Piliavan and Briar (1964) stressed the importance of suspects’ demeanor. Black and Reis (1970) found that the seriousness of offense and the wishes of victims (when one was present) are the most influential on police decisions to make an arrest. Recently Beckett and her colleagues (2006) reported that police drug enforcement practices affect who is arrested more than behavior patterns of users and sellers. While older studies were conducted using field observations from ride-alongs with patrolling officers, Beckett et al. (2006) used interviews and ethnography to identify and observe open-air drug markets and police responses to them.

Generally, researchers have found that not all of the observed racial differences in police contact, arrest, or incarceration can be explained by patterns of criminal behavior. Three coordinated studies, in Pittsburgh (Pittsburgh Youth Study), Rochester (Rochester Youth Development Study), and Seattle (Seattle Social Development Project), used existing longitudinal data sets to examine the extent to which arrest and charging decisions could be

accounted for by self-reported involvement in delinquency (Huizinga et al., 2007). While there were modest differences across the sites, the investigators all found that the racial differences in arrest were attenuated by differences in self-reported offending, but the race differences in police contacts remained statistically significant and substantial. These researchers, like others who have studied racial disparities, acknowledge that discrimination may be a part of the explanation of higher arrest and charging of Black youth, but they cannot adjudicate between it and some third, unmeasured reason for the unexplained differences. Our objective in the present study is to consider important social environmental forces (critical environments) that may lead to more police contact or higher rates of arrest for Black juveniles beyond what would be expected by differences in offending behavior. The four environments that we focus on are family, peers, school, and community. We will use a sample of relatively young juveniles (10th graders) to consider the relative importance of their self-reported delinquency, the effects of earlier police contact, and indicators of the nature and quality of each of these four environments.

RACE AND ENVIRONMENT

In our earlier work, we, like others who have studied racial disparities in the criminal justice system, did not measure discrimination. In the absence of a measure of police discrimination, we focus on Black/White differences in social environments. Discrimination would mean that criminal justice agents make racially prejudiced decisions to arrest, prosecute, or to sentence. It is likely that this happens since some Americans hold racist beliefs. But we feel that the likely presence of some prejudiced people in the system is too limited of an explanation of how race can negatively affect outcomes. In the United States, African Americans are at greater risk of victimization, school dropout, unemployment, and a host of other problems, in part, because they live in racially segregated communities (Massey, 1990; Peterson & Krivo, 1999; Williams & Collins, 2001). Racial residential segregation is a direct result of discriminatory practices in real estate markets and in mortgage lending (Charles, 2003; Munnell, Tootell, Browne, & McEneaney, 1996; Oliver & Shapiro, 1995; Ross & Yinger, 2002). The consequences of segregated communities are examples of institutionalized racism, not just individual prejudice. The environments in which African Americans live are the consequences of racialized patterns of social life (Massey & Denton, 1993).

Many Black youth grow up in families that are themselves products of Jim Crow America and the continuing stresses of racial inequality. Growing up in and living in these households may predispose some children to contact with police. In addition, Black students are more likely to be suspended or expelled from school (Eitle & Eitle, 2004; Gordon, Piana, & Keleher, 2000; Skiba, Michael, Nardo, & Peterson, 2002), thus being more likely to spend time on the streets where they might come into contact with police because they are supposed to be in school. In some cities they are more likely to go to schools that have police presence as well. Greater police presence in schools increases the probability that students will have contact with officers as a result of disciplinary actions. Further, crime rates are higher in Black neighborhoods so there ordinarily will be a greater police presence there. Both in schools and in communities, more police will increase the likelihood of contact. Children engaging in the same behavior in schools or neighborhoods without police or who live where there are just occasional patrols will have less chance of contact.

Our earlier work confirmed that family patterns, delinquent peers, school factors, and some features of communities increase the probability of Black adolescents coming into contact with police more than would be expected by any observably higher involvement in self-reported delinquent behavior. Children from “bad families” are more likely to draw the attention of police authorities. Children who go to school where there is greater police

presence or where school authorities differentially discipline minority youth are more likely to have police contacts. And children living amidst communities where there is more crime, criminals, and disorder have more police contacts.

The family is not ordinarily thought of as an environmental influence, but it clearly is. If a household has an abusive or an alcoholic parent, the character of familial interaction, and a child's response to it, will be different than if these characteristics of families are not present. We have included both problematic (risk) and non-problematic (protective) family functioning as potential contributors to differential contacts with police.

Are there race differences in family environments? Certainly there were for younger children (Crutchfield, Skinner, Haggerty, McGlynn, & Catalano, under review). Here we will ask, do these differences early on (in middle school) affect behavior in high school. Our earlier results are consistent with recent studies. For example Anderson (1999) distinguishes between "street" and "decent" families. The latter are those families that teach, promote, and model mainstream values and actions. Decent families encourage education, compliance with school rules, avoidance street conflicts, and respect for law and law enforcement officers. In contrast, street families support what Anderson calls the "code of the street." These codes encourage disrespect for authority, including the criminal justice system, and emphasize that in the streets one must take matters into one's own hands to ensure that those around them respect them. Disrespect is responded to aggressively by carriers of the code of the street, and this can include disrespect by school authorities or police officers. We did not measure Anderson's street and decent family concepts, but our results are consistent with his descriptions.

Anderson's thesis is not race specific, but his study was ethnography of Philadelphia's inner-city Black community. He was expressly writing about severely disadvantaged neighborhoods and the families and people who live there. Because Black families are more likely to live in such places they will more frequently experience the negative consequences of the distress of such places. Clearly the majority of African American families, even when living in very disadvantaged neighborhoods, will be characterized by Anderson's terms "decent."

Why might "bad families" have more police contacts? We can begin to answer this question by turning to old-school (and now very much discredited as social science) criminology, where the Jukes and the Kallikaks, two 19th-century families, were cited in very early works about the intergenerational transmission of problematic behavior (Sutherland, 1924). Presumably, local authorities of that day would have looked at the younger members of the Juke and Kallikak clans as potential suspects when a crime had been committed because they were so frequently involved in trouble. A more compelling argument, though, for why family environment might increase police contacts, independent of the behavior of children, can be found in Anderson's conceptualization (Anderson, 1999). Members of "street families," adhering to the "code of the streets," will get in trouble with the law (Anderson, 1999). In this era of community policing, it is likely that effective officers will have knowledge of who are in such families. In these situations, they may be more likely to seek out members of those families for questioning, just as 19th-century constables looked to the Jukes and the Kallikaks when something bad happened. Families will not only affect the behavior of juveniles, but we predicted that, independent of that behavior, children from "problem families" will get more police attention, warranted or not.

Family influences may be the most proximal for the younger teens that we studied earlier, but we are confident that peer influences are at least as influential for 10th graders. Associating with deviant peers is one of the primary risk factors for engaging in problem

behavior (Brody et al., 2001), but may also lead more directly to contact with law enforcement. As might be the case with family members, peers may also have had previous contact with law enforcement. Juveniles who associate with other teens who engage in illegal activity are more likely to experience a police contact regardless of their own illegal activity.

No other institution, except the family, so dominates children's lives as their school. A major portion of their waking hours is spent there, and, at least for those who do homework, school affects even non-school hours. School also heavily influences young people's behavior. Those who are educationally successful are less likely to be delinquent (Hamre & Pianta, 2001; Newcomb et al., 2002). School environments affect their social lives in positive directions: extracurricular activities, friendships, and budding love lives; and in negative directions: rivalries, bullies, and gangs. Peer relations in school are important determinants of young people's social status (Corsaro & Eder, 1990). Some students go to schools that must have doors equipped with metal detectors, others do not. Some schools have guards or police on hand while others have the luxury of not worrying so much about security. These and other environmental differences will affect both delinquency and police contact. And, because of the racial residential distribution of the American population, school environments vary by race.

School environments in the eighth grade affected the probability that students had police contact, above what might be expected based on behavior, in two ways: directly in school and indirectly in the community. First, where there is a police presence in the schools, officers likely become involved in school discipline issues that would not have provoked a police response in the community. During the period when the data that we are using was collected, all Seattle middle schools, the study site, had officers assigned to them. The Seattle Board of Education entered into an agreement with the Seattle Police Department to assign an officer to middle schools. Typically one officer was assigned to two or three schools. The actual police presence in schools depended on the perceived need. Likely those schools with more discipline problems or those with more "at-risk" students had more actual 'officer present' times. The officers had some discretion in how they allocated their time. It is easy to imagine that schools may have used the officers in 'get tough' discipline strategies. But readers should also recognize that officers may have intervened in the belief that early intervention would deter wayward children from a life of crime. This is, of course, the philosophy of the early juvenile courts (Platt, 1969).

A second means by which school environments might produce racial disparities in police contacts is as a result of school discipline. Children who are suspended from school will be in the streets when they ordinarily would not be. Seeing juveniles who are not in school between the hours of 8:00 AM and 3:00 PM may trigger police suspicion and thus contact. Seattle Public Schools, like many districts, has a history of racial disparity in school discipline, including suspensions (Wright, 2005).

Residential segregation means that the neighborhoods from which young White and Black people come from will be different in many important respects. It is well established that race and social disadvantage of neighborhoods—poverty, unemployment, welfare dependency, etc.—are related (Jargowsky, 1996; Massey, 1990). Black children live in neighborhoods with more negative social and economic influences (Leventhal & Brooks-Gunn, 2000; McLoyd, 1990). They are likely to be exposed to criminogenic forces, are more likely to be victims of crime, and more frequently live where there is greater fear of crime (Elliott, 1994; Finkelhor & Ormrod, 2001; Shihadeh & Flynn, 1996; Snyder & Sickmund, 2006). Consequently, there will be a greater police presence in the neighborhood environments of Black juveniles, as well as in their school environments.

In our earlier work we did not find that the level of neighborhood disadvantage predicted police contact, but if young people knew adults who engaged in deviant behavior, another way of measuring “problematic” networks, they had more police contacts. Black kids were more likely to have been exposed to such networks. The neighborhood or community environment can affect police contacts in two ways. As the criminological literature has long documented, there are important social forces that lead to higher levels of delinquency among some segments of the population (Bursik, 1993; Sampson, Raudenbush, & Earls, 1997; Shaw & McKay, 1942), but here we are interested in forces that will increase the probability of police contacts beyond those produced by criminal involvement. Because police know which neighborhoods have higher crime rates, enforcement is concentrated there, increasing the odds that a juvenile will experience police contact. A second means by which juveniles may be put at risk of involvement with the police in their community (Elliott, 1994) is by exposure to “risk-producing elements,” specific people who officers may watch out for. Anderson’s (1999) description of “street families,” those who embrace the “codes of the street,” are not just known by members of the community, but they are also known by law enforcement. Juveniles who spend time with carriers of the codes of the street or who spend time where such people frequent will have more opportunities to encounter police. We found affirmation for this thesis in our earlier analyses; we expect this factor to be more influential for children who are a few years older.

Why study the effects of children’s social environments on their subsequent contacts with police and arrests? As we stated earlier, police may have a variety of motivations for making contacts with youth; responding to criminal behavior, hassling kids who are a “pain,” or to benevolently try to straighten out the wayward. Unfortunately we do not know if police contacts have neutral, positive, or negative effects on the subsequent lives of young people. Labeling theorists hypothesize negative consequences. The logic that underlies the ideas that led to the founding of juvenile courts is more positive. In reality we do not know which of these alternatives more frequently occurs. We expect that for those whose lives are contextualized by an injustice narrative (e.g., the society, the criminal justice system, the police are racists), the former is more likely the case. We know that when African Americans perceive that they have been treated unjustly that there are important consequences (cf. Simons, Chen, Stewart, & Brody, 2003). The importance of a narrative of injustice is buttressed by results reported by Stewart, Baumer, Brunson, and Simons (forthcoming). They found that that Black youths felt that they were more “discriminated” against when they were out of place in White communities. Reasonably, racial disparity in police contacts and arrest are likely to be confirming experiences for Black teenagers. The first step in assessing racial differences in consequences is to examine the effects of early police contacts, which cannot be explained by observed differences in criminal behavior, on subsequent police contacts and arrest; the most proximal negative consequences. Here we will examine the affects of race differences in the early environments on police contacts and arrests by 10th grade.

METHODS

SAMPLE

Parents of eighth-grade students in the Seattle School District received a letter describing the study, and the parents were contacted by phone. Families were included if the teen and one or both parents consented to participate. Eligibility included self-identifying as African American (AA) or European American (EA), speaking English as their primary language, and planning to live in the area for at least 6 months. Forty-six percent consented (55% of AAs and 40% of EAs). The parents who refused were more likely to be EA, married, and had a higher education on average than those who consented. Other ethnic groups were not recruited.

The sample was stratified by teen race and gender. There were significant differences by race in several demographic variables (see Table 1). EAs reported higher per capita income and parental education, and AAs reported higher prevalence of single parenthood. Some teens in each race group self-identified as mixed race (19.6% AA, 12.5% EA), but were included in these analyses. Most primary caregivers were female (> 80%), with 71.6% being the adolescent's biological mother. Gender and relationship were similar across race with one exception: more African American youth had another female caregiver (e.g., grandmother, aunt) as a primary caregiver than did European American youth [$\chi^2(1) = 13.95, p < .001$].

Data collectors went to the family's home four times in 3 years: fall and spring of the 8th grade, spring of 9th grade, and spring of 10th grade. Questionnaires were self-administered to teens and their parents in their homes using laptop computers while the data collector was present. This insured that parents did not monitor their teens' responses. Prior to parent/teen interaction tasks, a trained research assistant set up video equipment, provided oral and written standardized instructions to each family, then left the room while the family completed the task. Upon completion of a warm-up task, the primary caregiver and the teen completed two structured interaction tasks: (a) a 10-minute problem-solving interaction, and (b) a 5-minute recognition task during which the parent and child complimented one another. Family members received \$15 each time they completed questionnaires. The family received \$50, and each participant (one teen and one or two parents) received \$15 each for completing observational measures.

MEASURES

Police Contact and *Ever Arrested* information was collected from teens in the survey at each data collection (8th, 9th, and 10th grade) and therefore represent any police contact, or any arrest occurring before the 10th-grade survey. Contact was coded as having occurred if the teen responded affirmatively to any of the following questions. In the first survey questions asked 'have you ever,' and in subsequent surveys the timeframe was 'since the last time we saw you': 1) been picked up or stopped by the police, but not arrested, 2) been in trouble with the police for something you did, 3) been arrested by the police, 4) spent time in juvenile detention center for something you did wrong? Students were counted as having an arrest if they answered positively to item #3. Of the 304 10th graders in the sample, 55% had no contact with police, 136 (45%) had some contact with police, 82 (27%) had "only contact" but were not arrested, 54 (18%) had been arrested, and 24 (8%) had been placed in detention.

Data for all explanatory variables were collected at the first survey conducted in the 8th grade. *Teen Self-report of Criminal Activity* was measured separately for property and violent crimes. Each was computed as the mean of two items measured on a 5-point scale of frequency in the past 30 days (0 = never, 1 = 1 to 2 times, 2 = 3 to 5 times, 3 = 6 to 10 times, and 4 = more than 10 times). Property crime includes arson and theft. Violent crime includes carrying a gun to school and hitting someone with the intent to hurt them.

Race was based on parents' reports of their child's race on school enrollment forms (0 = White, 1 = Black). *Gender* was reported by teens on the survey (0 = male, 1 = female). *Age* was measured in years calculated from birth dates reported on the survey and the date the survey was completed. *Single-parent Status* was based on parent report on the survey (0 = partnered, 1 = parent does not have a spouse or partner).

Household Per Capita Income was calculated from parent's endorsement of 1 of 11 categories for annual household income (before taxes). We assigned the midpoint of the

range and then divided by the number of people in the household as reported by parents on the survey.

Parent Arrest was computed as the sum of four dichotomous items on the parent survey (0 = no, 1 = yes). The items asked about 1) lifetime arrest, 2) arrests in the past year, 3) ever been to jail, and 4) ever been to prison. Items were summed across both parents in two-parent households.

Parent Juvenile Delinquency was computed as an index based on parent retrospect accounts of their own teen years, "Before you turned 18 did you" Response options were 0 = no, 1 = yes. The five items were 1) skip school, 2) get drunk, 3) run away from home overnight, 4) use a weapon in a fight, 5) often start physical fights.

Sibling Criminal Activity was measured with a single item, "In the past year, have any of your brothers or sisters done anything that could have gotten them in trouble with the police (like stealing, selling drugs, vandalism, etc.)" 0 = no, 1 = yes.

Family Conflict was computed as the average of 13 items ($\alpha = .84$) taken from the Strauss Conflict Tactics Scale (Straus, 1990). Response options for eight items were a Likert-type scale from 1 to 7. One item ranged from 1 to 4 and four items were dichotomous. The item scores were standardized (mean = 0, std = 1) and then averaged. Items included "Family members often criticize each other," and "In the past month, how often did you yell, insult, or swear at your teen when the two of you have disagreed about something?"

Observed Rewards for Positive or Negative Behavior were computed as composites of item responses from trained raters reviewing videotapes of parent-teen interactions. Variables were measured using the Social Development Model-Observational rating system (Spagnolo et al., 2002). Eighteen raters (5 men, 13 women; 28% African American, 66% European American, 6% Hispanic American) completed an average of 93 hours of training. Ratings were made using 5-point likert-type scales (Not at All, A Little, Sometimes, Often, Very Often). Twenty percent of the videotapes were double rated to check inter-rater reliability. Inter-rater agreement was high ($M = 89\%$) (Lindahl, 2001). *Rewards for Positive Behavior* was computed as the mean of seven items including "Caregiver was warm and encouraging of teen's opinions," and "Caregiver reinforced or rewarded teen's prosocial behavior or attitudes." *Rewards for Negative Behavior* was computed as the mean of four items, including "Caregiver failed to respond to teen's negative or antisocial behavior or attitude" and "Caregiver reinforced or rewarded negative behavior or attitudes."

Delinquent Peers was measured with teen report. The teens were asked to name their three best (or closest) friends (first names or initials only), and were then asked a series of questions about each of those friends, including having done anything in the last year that could have gotten them in trouble with the police. A dichotomous score was created, with 1 indicating at least one of the friends had engaged in the behavior.

Grades were based on reports from teens: "Putting them all together, what were your grades like last year?" Responses ranged from 1 = very poor to 6 = very good.

School Discipline was computed as the average of four standardized items from the teen survey, including "In the past year, how often have you been sent out of the classroom for doing something wrong?" ($\alpha = .88$).

Neighborhood Resources and Cohesion was measured using 10 items from the parent survey. Item responses were from 1 to 5 indicating how accurate the description or how

frequent the activity. High scores indicate positive neighborhoods. Items include “How often do your neighbors visit each other’s homes” and descriptors such as “nice parks and playgrounds” and “crime” ($\alpha = .74$).

Neighborhood Environment was assessed using the average of nine items from the teen survey. All items were measured on a 4-point scale (YES, yes, no, NO), coded so high scores indicate safer, less deviant neighborhoods. Items included “If a kid carried a handgun in your neighborhood, would he or she get caught by the police?” and “Do you feel safe in your neighborhood?” ($\alpha = .79$).

Teen Report of Deviant Adult Network was computed as the mean of four items ($\alpha = .86$) measured on a 5-point scale. The items were, “About how many adults (over 21) do you know personally who have ... in the past year?” The deviant behaviors were: use marijuana, crack, cocaine, or other drugs; sold or dealt drugs; gotten drunk or high; and done other things that could get them in trouble with the police like stealing, selling stolen goods, mugging, assaulting others, etc.

ANALYSIS

Preliminary analyses included chi square to examine simple race differences in police contacts. Race differences in the 23 predictors from six domains (self-reported crime, demographics, family, peer, school, and community) are reported elsewhere (Crutchfield, Skinner, Haggerty, McGlynn, & Catalano, under review). Logistic regression analyses were conducted to determine the unique contribution of predictors to the probability of reporting a police contact or an arrest (separately) at any time before the 10th-grade survey. Predictors were entered in blocks to reduce the number of separate models to be tested and to examine the effects of predictors within a domain simultaneously. Seven models were tested (see Tables 2 and 3) in a hierarchical fashion. Step 1 included the teen’s self-report of criminal activity (property and violent crimes separately) and race. In predicting arrest, any police contact by eighth grade was included in this step. Step 2 included self-reported criminal activity plus demographic variables (race, gender, age, per capita income, and single-parent household). In order to determine if variability in other domains accounts for race differences, predictors are added in successive steps in this order: parent and sibling criminal activity, family interactions, delinquent peers, and school and community context. Although it is not possible to calculate a true R^2 for logistic regression models, a measure of the variance explained by the model can be calculated using the likelihood-ratio index (pseudo R^2), comparing the log likelihood of the intercept-only model to that of the model including predictors and then adjusting for the number of predictors in the model. To examine whether predictors of police contacts were different for Black and White teens, we tested the interactions of each predictor by race in separate models.

Because families were recruited through school, and school-related variables were included as predictors, the clustering of families within schools was addressed. The SAS GENMOD procedure (SAS Institute, 2002) was used to adjust the standard errors of model coefficients to account for clustering using the generalized estimating equations method (Liang & Zeger, 1986). Missing data were imputed (Schafer & Graham, 2002) and implemented in SAS v.9.1 (SAS Institute, 2002). Missing data ranged from 0 to 7% across variables, with slightly more than 27% missing across the full list of variables. Forty imputations were calculated and regression coefficient estimates were averaged. Appropriate standard errors were computed using the MIANALYZE procedure (SAS Institute, 2002). Pseudo R^2 is only an approximation of variance explained by the model and has not been validated for estimation across multiply imputed datasets. For this reason, pseudo R^2 was calculated for models estimated with complete data, and sample sizes for those models are provided in the table.

RESULTS

Means and standard deviations are presented by race and for the total sample in Table 1. African American teens are a third more likely than Whites to report having had a police contact (61% vs. 41%, $X^2 = 11.97$, $p = .0005$). Significant race differences were evident for 11 of the 20 predictors. Black teens reported more property crime ($t = 5.26$, $p = .02$), but not more violent crime than White teens. As reported above, African American families had lower income and were more likely to have single parents than White families. Black parents reported more arrests and incarceration ($t = 26.96$, $p < .0001$), but not more juvenile delinquency than Whites. Black teens were no more or less likely to report sibling criminal behavior than Whites. Family conflict was higher ($t = 16.37$, $p < .0001$; $t = 11.82$, $p = .0007$), and observed rewards for positive behavior were lower ($t = 19.54$, $p < .0001$) among Blacks than Whites. No race difference was evident for rewards for negative/problem behavior. Blacks in the sample had fewer delinquent peers than Whites (11% vs. 19%, $X^2 = 13.41$, $p = 3.90$, $p = .05$). African Americans reported lower grades and more school disciplinary events ($t = 32.85$, $p < .0001$; $t = 41.37$, $p < .0001$) than White students. Although parent reports of neighborhood resources and cohesion were not different, Black teens did report less positive neighborhoods than Whites ($t = 6.67$, $p = .01$). Correlations between pairs of predictors ranged in magnitude from 0 to .58 (race and income). Several other predictors were related to race as indicated by the race differences noted above. Correlations with the strongest relationship include income with single parent ($r = -.39$, $p < .001$), parent juvenile delinquency with parent arrest ($r = .37$, $p < .001$), teen police contact by 8th grade with school discipline ($r = .48$, $p < .001$) and deviant adult network ($r = .39$, $p < .001$). School discipline was correlated with grades ($r = -.38$, $p < .001$) and teen reports of neighborhood safety ($r = -.36$, $p < .001$), and teen neighborhood safety was correlated with adult deviant network ($r = -.38$, $p < .001$). All other correlations were below .37.

Odds ratios are presented for each predictor as they were included in each model in Tables 2 and 3. Self-reported property crime, but not violent criminal activity, significantly increased the probability of ever having a police contact in Step 1 (OR = 2.59). In predicting police contact, race differences were significant (OR = 2.08), as were gender differences (OR = .43), after controlling for self-reported criminal activity in Step 2. Black teens were more than twice as likely to have a police contact as White teens. Girls were less than half as likely to report a police contact as boys.

Black teens were more than twice as likely to be arrested (OR=2.20) and teens with an early police contact were almost 9 times more likely to be arrested (OR=8.85). Girls were far less likely to be arrested (OR= .39). Higher income conferred some protection from arrest (OR= .38). Race differences in arrest s were not significant after controlling for demographic variables in Step 2.

In Step 3, two of three family criminal involvement predictors were significant predictors of police contact. Having a parent with of history of arrest increased the probably of a contact by 34% (OR=1.32). Sibling criminal activity increased the likelihood of police contact by over 3 times (OR = 3.22). Race differences in police contacts were not significant after controlling for family criminal activity. Having a parent who had been arrested significantly increased the likelihood of teen arrest (OR=1.40).

Measures of family context were added in Step 4. Neither of the observed parenting measures significantly reduced the likelihood of police contact or arrest. Family conflict did significantly predict police contacts (OR=1.77) and arrest (OR=2.12). In this step, self-reported criminal activity and race were not significantly predictive.

In Step 5, the measure of delinquent peers was added. Association with at least one close friend who broke the law more than tripled the risk of police contact (OR = 3.13) and arrest (OR=3.29).

School factors were added in Step 6. Grades were not significantly related to police contacts but having good grades predicted a lower likelihood of arrest (OR=0.65). Teen reports of school disciplinary contacts significantly increased the likelihood of police contacts (OR = 1.97), but not arrest.

In the last model (Step 7) community contextual measures were added. Teen and parent reports of neighborhood quality and cohesion were not related to police contacts or arrests. However, teen reports of knowing adults who drank, got high, or committed crimes in the past 12 months were significant in predicting police contact but not arrests. Knowing adults who exhibit these deviant behaviors significantly increased the likelihood of police contacts (OR = 1.42).

Pseudo R^2 statistics for these models should be interpreted with some caution. There are no statistical tests for the incremental change or differences between nested models. Furthermore, they have been calculated without addressing missing data and are therefore based on subsamples of the original 331 (see the last line in Tables 2 and 3). Adjusted pseudo R^2 increases from 5% to 9% with the addition of predictors from each domain. The last model, including 19 predictors of police contact explained 38% of the variability in the risk of a police contact. Variance accounted in predicting arrest was a little higher (43%).

Tests of interactions between race and each predictor separately produced three statistically significant interactions in predicting police contacts. Post hoc analyses indicated two of these were not interpretable as the effects of the predictor were not significant for either Black or White teens. The interaction between parent arrest history and race was such that having a parent who had been arrested significantly increased the odds of a police contact for Black youth, but not for Whites. One out of 19 is about 5%, and could arise by chance. No significant interactions were detected in predicting the chances of arrest. No further investigation or report of interactions was warranted.

DISCUSSION

Our intent in these analyses was to shed light on questions related to race disparities in police contacts and arrests during high school. We investigated whether there are racial differences in police contacts and arrests for young people early in high school. Not surprisingly and similar to other research findings, we found that Blacks were more likely to be arrested. By 10th grade, one fourth of Black youth had been arrested compared to less than 10% of White youth.

We also investigated to what extent self-reported criminal behavior predicts police contacts and arrests. Although Black youth report higher levels of property crime at eighth grade, controlling for property crime does not account for race differences. It is important to note that there were no significant differences between reports of violent crime by Blacks and Whites at eighth grade. While property crime at 8th grade was predictive of police contacts at 10th grade, Black youth were still twice as likely to have had a police contact. Further, the strongest predictor of arrests at 10th grade is police contacts at 8th grade. In fact, youth with police contacts at 8th grade are almost 9 times more likely to be arrested by 10th grade than those without contacts when accounting for police contacts at 8th grade. When accounting for all other environmental domains including self-reported criminal behavior youth with a police contact by 8th grade are still 5 times more likely to have an arrest by 10th grade. This research finds that Black youth are more likely to have an early police contact (by eighth

grade), and thus be at greater risk for arrest by high school. This provides some support for the “narrative of injustice” discussed earlier in that that early police contacts may have a detrimental effect on youth rather than a preventive impact.

Given that race makes a difference in both police contacts and arrests at 10th grade over and above self-reported behavior, we wanted to examine whether Blacks have behavioral characteristics or live in social environments that are associated with or that predict contact or arrest. In other words, which if any features of juveniles’ social environments explain observed racial differences. First, we explore what accounts for race differences in police contacts, and then we will consider arrests.

In predicting police contacts at 10th grade we found that the addition of demographic variables did not eliminate the significant race effect and therefore do not explain the higher rate of police contacts of Blacks than Whites. However, race was no longer a significant predictor of police contact when we entered the family criminal involvement variables; specifically, parents’ history of arrest and siblings criminal involvement. Parents of Black youth were more likely to report a history of arrest than parents of White youth. Thus, Black teens are more vulnerable to police contact because their parents were more likely to have a history of arrest. This may support the notion that authorities may pay more attention and target members of “street families.” Interestingly however, there were no differences by race in youth reports of sibling criminal behavior at eighth grade.

When controlling for income as a predictor of police contacts, the impact of race remains significant. However, when controlling for income as a predictor of arrests, the impact of race is not significant. Regardless of race and self-reported criminal behavior, youth from poorer families are more likely to be arrested. Even though those in the sample are drawn from largely the same sections of the city (a small portion of the White youths live in the more affluent north end of Seattle), race and income are correlated in our sample ($r = .58$), and it is clear that family income is important. Black (1976) and Klinger (1997) predicted that there would be less policing in poorer communities and where there is more crime. Our result, that children of lower SES are more likely to be arrested suggests that this is not the case; a strange, negative (arrests) kind of racial equality takes place for poor Black and White children. But, of course, since more African Americans are poor they more frequently experience arrests.

In addition to those variables that accounted for race differences, there were other expected unique predictors from each environmental domain. In the family relationships domain, family conflict was significant for both police contacts and arrests. Delinquent peers were also significantly predictive of both police contacts and arrests. In the school domain, school disciplinary contacts predicted police contacts whereas low grades predicted arrests. Finally, a deviant adult network predicted police contacts, but not arrests. Blacks report a higher level of deviant adults in their social network. Just as families with a history of deviance are more likely to attract police attention, we expect being part of a larger network that includes deviant adults and peers may have the same effect of attracting the attention of authorities and leads to police contacts.

We explored interactions between all predictors and race for both outcomes. The only interpretable interaction was between race and parent history of arrest predicting police contacts. None of the interactions were significant for predicting arrests. This may be a consequence of a relatively small sample providing insufficient power for the test of interactions. Given that only one interaction was significant, we are reluctant to interpret the finding.

Our attempt here was to understand what accounts for observed race differences in police contacts and arrests. Our strategy was to add explanatory variables and observe when the race variable was not significant. Although we have interpreted that race effect is nonsignificant at a particular step, it is important to note that all of the significant predictors may contribute to race differences in the outcomes. Overall, with each step, the effect of race diminishes incrementally. However, at every step of the models we are increasing the amount of variance explained. It is possible that specific predictors in subsequent steps of the analyses are accounting for some of the race differences.

We should note that gender remains a significant predictor of both police contacts and arrests, even after delinquency, past contacts, and environment are taken into account. Boys are more likely to have police involvement and arrests in their personal histories. But here, we have not fully considered gender. We did not find a statistically significant interaction between race and gender, but as noted above, tests of interactions may be underpowered in this sample.

This study contributes to our understanding of why Black teens are more likely than White teens to have police contacts and arrests during high school. There are multiple contributing factors that derive from the youth's family, school, peers, and broader environments that matter and lead to Black youths having more contacts and arrest than their White counterparts.

We began by explaining that the question of differential police contacts and arrests is important because of implications for future problems. Here we have affirmed that police contact for Black juveniles while they are in middle school is related to a more likely arrest by high school. Their early experience puts them at risk. What else are they at risk for? Researchers have pointed out that African Americans who feel that they have been discriminated against are subject to problems (e.g., poorer self-concept, less school success). What additional racial disparities in criminal justice system experience, health outcomes, problematic behaviors, or other problems may be related to differential contacts with police at an early age?

Some officers no doubt engage more with young Black people with benevolent intentions, but our findings, as well as those reported by others, suggest that those good intentions may have negative consequences. We will, in future research explore this possibility more fully. In the meantime, we should collectively recognize that the injustice narrative remains an important part of American society and racial differentials in police contacts and arrests likely feed it. As long as that narrative is there, it likely that even benevolent intentions will go awry. And, even the most neutral of observers of American social life knows that not all police-Black juvenile interactions are benevolent.

Acknowledgments

This paper was supported by Grant # R01- DA021737-02 from the National Institute on Drug Abuse. The content is solely the responsibility of the authors and does not necessarily represent the official views of the funding agencies.

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Richard F. Catalano, Ph.D., is the Bartley Dobb Professor for the Study and Prevention of Violence in the School of Social Work and the Director of the Social Development Research Group at the University of Washington. Dr. Catalano has investigated the causes of problem and positive behavior and has designed and tested family, school, and community-based approaches to reduce risk while promoting positive development. He has published more than 200 articles and has received a number of awards from practitioners and scientific societies.

Martie L. Skinner, Ph.D., is a research scientist at the Social Development Research Group at the University of Washington. She evaluates family-focused interventions and is co-principal investigator of the Family Connections study. Her current focus is on the relationship between biomarkers of stress and the development of substance abuse disorders.

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Table 1

Descriptive Statistics for Police Contacts and Individual, Family, Peer, School, and Neighborhood Predictors Collected in the Eighth Grade

Measure	Range	African American		European American		Total	
		Mean	Std	Mean	Std	Mean	Std
Police contact 10 th grade	0/1	0.55	0.50	0.35	0.48	0.45**	0.50
Arrest 10 th grade	0/1	0.25	0.43	0.09	0.28	0.17**	0.37
Property crime	0 - 4	0.25	0.68	0.11	0.37	0.18*	0.55
Violent crime	0 - 4	0.12	0.49	0.05	0.25	0.09	0.39
Race	0/1					0.49	0.50
Police contact 8 th grade	0/1	0.40	0.49	0.21	0.41	0.30**	0.46
Gender	0/1	0.49	0.50	0.48	0.50	0.48	0.50
Age	12 - 15	13.68	0.47	13.67	0.40	13.67	0.44
Per capita income	785 - 83,333	7,816	9,361	21,970	15,958	15,025***	14,913
Single parent	0/1	0.57	0.49	0.24	0.43	0.40***	0.49
Parent arrest	0 - 5	1.01	1.25	0.41	0.79	0.70***	1.08
Parent juv. del.	0 - 5	1.33	1.36	1.12	0.97	1.22	1.18
Sibling crime	0/1	0.13	0.34	0.08	0.27	0.11	0.31
Family conflict	-1.03-3.18	0.13	0.63	-0.12	0.52	0.00***	0.59
Obs. reward for positive behavior	1 - 4.8	3.02	0.72	3.37	0.68	3.20***	0.72
Obs. reward for negative/problem behavior	1 - 4.33	1.38	0.56	1.34	0.46	1.36	0.51
Delinquent peers	0/1	0.11	0.31	0.19	0.39	0.15*	0.36
Grades	1 - 5	3.33	1.01	3.99	1.11	3.66***	1.11
School discipline	-0.63 - 3.38	0.34	0.95	-0.25	0.69	0.04***	0.88
Parent neighborhood	2.50 - 5	3.88	0.54	3.94	0.39	3.91	0.47
Teen neighborhood	1 - 4	2.97	0.59	3.13	0.54	3.05*	0.57

Measure	Range	African American		European American		Total	
		Mean	Std	Mean	Std	Mean	Std
Deviant adult network	1 - 5	2.13	1.14	1.53	0.83	1.82 ***	1.04

* Significance tests indicate race differences of $p < .05$

** Significance tests indicate race differences of $p < .001$

*** Significance tests indicate race differences of $p < .0001$

Table 2

Odds Ratios for Logistic Regressions Predicting Self-report Police Contact by Tenth Grade

Predictor	Step 1	Step 2	Step 3	Step 4	Step 5	Step 6	Step 7
1. Property crime	2.59**	2.29**	2.03*	1.63	1.48	1.34	1.14
2. Violent crime	1.39	1.48	1.48	1.36	1.23	0.98	0.82
3. Race	2.08**	1.82*	1.67	1.55	1.84	1.28	1.17
4. Gender		0.43**	0.39**	0.40**	0.40**	0.49*	0.45*
5. Age		1.82	1.84	1.70	1.65	1.75	1.55
6. Per capita income		0.81	0.93	1.06	1.05	1.06	1.08
7. Single parent		0.87	0.96	0.94	0.87	0.79	0.77
8. Parent arrest			1.32*	1.40*	1.35*	1.34*	1.34*
9. Parent juv. del.			1.26	1.23	1.23	1.20	1.14
10. Sib crime			3.22**	3.25**	3.25*	2.64*	2.56
11. Family conflict				1.77*	1.68*	1.40	1.42
12. Obs. reward pos				0.75	0.70	0.76	0.73
13. Obs. reward neg				1.77	1.67	1.45	1.49
14. Delinquent peers					3.13**	2.69*	2.08
15. Grades						0.91	0.90
16. School discipline						1.97**	1.80**
17. Parent nbrhd							0.97
18. Teen nbrhd							0.72
19. Deviant adult ntwrk							1.42*
McFadden's Adj Pseudo R ² (sample size)	.05 (312)	.11 (302)	.15 (299)	.20 (291)	.32 (263)	.35 (262)	.38 (254)

Table 3

Odds Ratios for Logistic Regressions Predicting Self-report Arrests by Tenth Grade

	Step 1	Step 2	Step 3	Step 4	Step 5	Step 6	Step 7
1. Property crime	1.19	0.97	0.86	0.75	0.49	0.60	0.64
2. Violent crime	1.62	1.77	1.90	2.10	2.32	1.93	2.12
3. Race	2.20*	1.17	1.07	0.99	1.09	0.90	0.93
4. Police contact by 8 th grade	8.85**	8.58**	8.17**	6.36**	6.30**	4.31**	5.10**
5. Gender		0.38*	0.37*	0.28**	0.26*	0.29*	0.32*
6. Age		0.84	1.01	0.86	0.75	0.59	0.68
7. Per capita income		0.50**	0.59*	0.70+	0.59+	0.62+	0.57+
8. Single parent		0.88	1.09	1.21	0.86	0.79	0.71
9. Parent arrest			1.40*	1.46*	1.45*	1.52*	1.58*
10. Parent juv. del.			1.20	1.21	1.25	1.16	1.21
11. Sib crime			1.38	1.46	1.21	0.98	0.96
12. Family conflict				2.12*	2.14+	2.41*	2.44*
13. Obs. reward pos				0.68	0.68	0.68	0.70
14. Obs. reward neg				1.73	1.58	1.54	1.60
15. Delinquent peers					3.29*	3.29*	3.03+
16. Grades						0.65*	0.65+
17. School discipline						1.57	1.54
18. Parent nbrhd							1.75
19. Teen nbrhd							0.84
20. Deviant adult ntwk							0.80
McFadden's Adj. Pseudo R ² (sample size)	.21 (304)	.28 (295)	.29 (292)	.32 (284)	.39 (256)	.41 (255)	.43 (247)