NEIGHBORHOOD STRUCTURAL CHARACTERISTICS, INDIVIDUAL-LEVEL ATTITUDES, AND YOUTHS' CRIME REPORTING INTENTIONS*

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Although the "stop snitching" phenomenon has brought recent attention to crime reporting, researchers have recognized for a long time the importance of this issue. Early studies focused on individual-level factors related to reporting, but recently, researchers have begun to examine neighborhood-level predictors. Most of these studies, however, omit key individual-level predictors of reporting and provide relatively little insight into the individual-level processes through which neighborhood context might affect reporting. This study uses survey data from a

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multisite, school-based study to examine whether neighborhood structural characteristics and individual-level attitudes and experiences are related to youths' intentions to report crime. In addition, we assess whether neighborhood characteristics influence reporting via their effect on individual-level attitudes and experiences. We find that neighborhood poverty has an inverse relationship with crime reporting intentions and that numerous individual-level measures are associated with reporting, including attitudes toward the police, delinquency, and perceptions of the community. Importantly, the effects of neighborhood characteristics are reduced when youths' attitudes and experiences are included in the model. Taken together, our findings suggest that neighborhood context might affect reporting by shaping the attitudes and experiences of youth.

The "stop snitching" phenomenon has brought renewed attention to the issue of crime reporting. Typically aimed at inner-city youth and often spread through popular hip-hop music, the message is clear: Report a crime and face retaliation. One of the most visible examples involved the distribution of an underground DVD in Baltimore encouraging witness intimidation (Carmelo Anthony featured in drug video, 2004). This highly publicized story brought widespread attention to the "stop snitching" campaign, which has been reviled by law enforcement for making it more difficult to clear cases and for disrupting criminal trials (Kahn, 2007). Jones-Brown (2007) suggested that this phenomenon is an outgrowth of strained relationships between African American communities and law enforcement in which the police often are viewed as ineffective or uncaring (see also Kennedy, 2008); however, similar stigmas against snitching have been observed in Latino communities (Solis, Portillos, and Brunson, 2009). The "stop snitching" campaign generally is targeted at criminals who snitch on others to obtain deals from the police or prosecutors (Rosenfeld, Jacobs, and Wright, 2003); nonetheless, it can permeate into the larger community and make citizens reluctant to report crime.

Although the "stop snitching" phenomenon has brought recent attention to crime reporting, researchers have recognized the importance of this issue for a long time. Practically, citizen reporting affects the types and the amount of crime that come to the attention of the police. To the extent that the willingness to report varies across contexts, official estimates of the levels and patterns of crime over time and across place might be biased (Baumer and Lauritsen, 2010). This bias has implications for the distribution and mobilization of criminal justice resources (Skogan, 1976) as well as for research that uses official crime statistics to estimate the effects of macrolevel characteristics on crime (Baumer, 2002). In addition, a lack of reporting might reduce public safety and quality of life in neighborhoods

where residents cannot or are unwilling to call on the agents of formal social control for assistance (Hawkins, 1987; Kennedy, 1997; Tonry, 1995). In this manner, "Non-reporting subverts our interest in the goal of equity in the criminal justice system" (Skogan, 1984: 116).

Early work on crime reporting focused on victims' likelihood of reporting their experiences to the police and how this factor was related to their demographic characteristics, characteristics of the victimizations, and to a much lesser extent, their attitudes and experiences, especially regarding the police (Schneider, Burcart, and Wilson, 1976; see Skogan, 1984, for a review). More recently, an increasing recognition that individual behaviors and attitudes are shaped by ecological contexts has led researchers to examine macrolevel predictors of reporting as well (e.g., Baumer, 2002; Goudriaan, Wittebrood, and Nieuwbeerta, 2006; Schnebly, 2008). Yet, most of these studies omit key individual-level predictors, such as experiences with the police and involvement in delinquency and delinquent networks. As a result, they provide an incomplete picture of the factors influencing crime reporting and fail to consider the mechanisms through which macrolevel characteristics affect individual-level reporting.

Building on prior work, we use survey data collected as part of a large, multisite, school-based study to examine whether neighborhood structural characteristics and individual-level attitudes and experiences are related to youths' willingness to report crime they might observe in the community. In addition, we assess whether neighborhood characteristics exert an independent effect on reporting intentions once individual-level attitudes and experiences are taken into account or whether youths' attitudes and experiences mediate the effect of context on reporting.

This work extends prior research in several ways. First, we examine the effects of both individual- and community-level factors on youths' intentions to report crimes they might observe in the community. Importantly, we include a more expansive range of individual-level factors than have been examined in past studies, including students' views regarding the role of youth in the community, knowledge of victim assistance services, experiences with and attitudes toward the police, and delinquent behavior. Because the decision to report a crime ultimately is made by the individual, it enables us to assess the individual-level processes through which neighborhood context might affect reporting intentions.

Second, unlike most studies examining macrolevel and microlevel influences on reporting, our study uses a sample of school-aged youth. Traditionally, youth have been studied as the objects, not the administrators, of social control (Wilkinson, 2007); therefore, little is known about their reporting intentions (but see Brank et al., 2007; and Watkins, 2005). Yet youth comprise a disproportionate share of offenders and victims (Snyder, 2003), making the study of youths' reporting intentions of paramount

importance. In addition, findings based on adult samples might not be generalizable to adolescents if the predictors of reporting are age-graded (Finkelhor and Ormrod, 2001; Watkins, 2005).

In the next section, we outline the theoretical literature and empirical research that is relevant for understanding youths' intentions to report crime. We pay particular attention to studies that include measures of both neighborhood structural context and individual-level attitudes and experiences. Although our study is concerned with youths' willingness to report crimes they might observe in the community to any authority figure (police, teachers, or parents), most research in this area has examined whether individuals reported their own victimization experiences to the police. This type of reporting, which makes up a substantial portion of crimes that become known to law enforcement (Skogan, 1984), might have a different etiology than third-party reporting. Moreover, although correlated, individuals' stated intentions toward crime reporting might not converge perfectly with their actual behavior (Bickman and Helwig, 1979).[1] However, given the limited research that focuses on macrolevel characteristics associated with reporting observed crime, we draw on this literature when relevant.

THEORETICAL BACKGROUND

Past work has drawn from several theoretical frameworks to explain the relationship between neighborhood context and reporting. According to social disorganization theory, neighborhoods characterized by high levels of poverty, mobility, and heterogeneity have lower levels of social control and are less able to regulate the behavior of community members, especially youth (Shaw and McKay, 1972 [1942]). Structural characteristics of neighborhoods, such as poverty and mobility, might decrease an individual's willingness to report crime by disrupting the formation of social ties between residents and increasing anonymity, reducing social cohesion, and fostering distrust in the police (Warner, 2007). Therefore, individuals living in poor neighborhoods with a great deal of residential mobility might be less willing to intervene on behalf of others because "the rules are unclear and people mistrust or fear one another" (Sampson, Raudenbush, and Earls, 1997: 919).

In addition, social disorganization theory posits that poverty and high mobility limit a community's ability to forge effective relationships with

1. Although these two types of reporting are most likely related, they involve different motivations and therefore might have different predictors. Reporting observed crimes can be considered a method of intervening and thus a form of social control that involves third-party intervention that does not benefit the reporter directly.

agencies outside the neighborhood, such as the police (Bursik and Grasmick, 1993). As a result, residents of socially disorganized communities might have little faith that the police will keep them safe (Warner, 2007). Similarly, these communities often have difficulty securing other types of resources, such as victim assistance services. This difficulty might reduce residents' feelings of empowerment and inhibit reporting by sending the message that little can be done when crimes occur. In contrast, increased awareness of services provides tangible evidence that assistance is available and perhaps increases confidence in system actors (Kidd and Chayet, 1984).[2]

Anderson's (1990, 1994, 1999) ethnographic work on Philadelphia neighborhoods provides additional insight into how community characteristics, particularly poverty and racial isolation, are related to individuals' willingness to report crimes they might observe. According to Anderson, residents of predominantly Black, disadvantaged urban neighborhoods have become alienated from mainstream society and institutions and must learn how to navigate the terrain of neighborhoods where informal social control has broken down. Rather than functioning as a "community," residents are more concerned about living their individual lives while minimizing hassles. Although they make efforts to coexist in the neighborhood, the overarching theme to life for these residents might be characterized as "I just see and don't see, watch my back, and mind my own business" (Anderson, 1990: 101).

Anderson's work (1999) as well as the work of others (e.g., Bass, 2001a, 2001b; Jones-Brown, 2007; Websdale, 2001) also highlights the tenuous relationship between predominantly Black communities and the criminal justice system. These negative relationships are partially a result of the historical role of the police in enforcing laws that regulate the public activities of African Americans (Bass, 2001a, 2001b). Individuals in "racialized spaces" are subject to seemingly arbitrary stops by the police, which contribute to their dissatisfaction with and distrust of law enforcement (Bass, 2001a, 2001b). At the same time, elevated neighborhood crime rates, regardless of police activities, might foster a sense of cynicism about the

2. Some argue that social disorganization theory can be interpreted as predicting the opposite relationship between neighborhood organization and reporting (i.e., individuals living in socially disorganized neighborhoods will be more likely to report crime because residents lack the capacity to exert informal social control, which would enable them to deal with community problems without calling the police [e.g., Baumer, 2002; Laub, 1981; Wells et al., 2006]). Although this trend might be true for adults, youth would not be expected to respond to a crime by actively intervening. Rather, they might be more likely to report the crime to someone else, such as a parent, teacher, community member, or police officer, who can intervene on their behalf.

effectiveness of formal social-control agents (Brunson, 2007; Carr, Napolitano, and Keating, 2007). Equally important, research has found that officers adjust their enforcement activities based on their views of the "normality of deviance," vigorously enforcing the law in areas with relatively little crime but reducing the vigor where deviance is viewed as normal (Klinger, 1997; Smith, 1986). Therefore, residents in high crime neighborhoods might be reluctant to call the police because they do not trust that the police will protect them from retaliatory offending (Anderson, 1999).

Although Anderson's (1999) work specifically focuses on Black communities, research suggests that youth living in predominantly Latino and immigrant communities might face similar issues. Solis, Portillos, and Brunson's (2009) study of Afro-Caribbeans in New York City illustrates how Latino youth perceive that police exhibit little concern for the safety of their neighborhoods, responding slowly to calls for service and treating citizens with disrespect. Moreover, like in Black neighborhoods, this underpolicing tends to be coupled with aggressive overpolicing, which strengthens youths' negative view of law enforcement and might reduce the likelihood that they will call the police. Both fear of crime and negative attitudes toward the police are enhanced by the sharing of information—based on both first-hand and vicarious experiences—between family members and friends (Menjívar and Bejarano, 2004).

The experience of residents living in primarily Latino neighborhoods differs in some important ways from those residing in predominantly Black communities because Latinos are the subject of profiling based on both their ethnicity and their immigrant status (Solis, Portillos, and Brunson, 2009). Sweeps by law enforcement and immigration services breed generalized fear and distrust of formal authority among residents of immigrant and Latino communities (Menjívar and Bejarano, 2004). Legal residents also are affected by the enforcement of immigration laws in neighborhoods with high concentrations of immigrants because they are likely to have friends or family members who are undocumented (Solis, Portillos, and Brunson, 2009). Therefore, residents in these communities might be reluctant to call the police for fear of getting a neighbor deported (Menjívar and Bejarano, 2004).

Finally, several different theoretical perspectives, such as social disorganization, strain, and subcultural theories, and a good deal of empirical work indicate that levels of offending differ by community characteristics, including disadvantage, racial and ethnic composition, and mobility (e.g., Shaw and McKay, 1972 [1942]). Therefore, youth living in neighborhoods with high levels of these attributes might be more involved in illicit behavior themselves and more likely to have friends or family members who engage in offending. This scenario might create a deterrent to reporting

crime if youth are worried about getting themselves or friends, family members, or neighbors into trouble (Baumer, 2002; Wright and Decker, 1997). Youth seen talking with the police in these areas might be branded as "snitches," possibly invoking retaliation (Rosenfeld, Jacobs, and Wright, 2003).

Combined, the theoretical literature points to several neighborhood characteristics that might be relevant for understanding reporting intentions including poverty, ethnic, racial and immigrant concentrations, and mobility. Moreover, this work suggests that structural characteristics affect reporting intentions by shaping the experiences and attitudes of youth with regard to the police, delinquency, victimization risk, and perceptions of the community and community resources. In the next section, we present the empirical work that examines this issue.

EMPIRICAL RESEARCH

NEIGHBORHOOD CONTEXT AND REPORTING

Relatively little research has assessed how neighborhood structural characteristics affect youths' intentions to report crime. Some studies using adult samples have examined individuals' victimization reporting behavior but have included few measures of individual attitudes and experiences (e.g., Baumer, 2002; Goudriaan, Wittebrood, and Nieuwbeerta, 2006; Schnebly, 2008). Findings from these studies are mixed. Although some studies find no relationship between poverty and reporting victimization to the police (e.g., Gottfredson and Hindelang, 1979), others find a linear or curvilinear relationship, at least for some crime types (Baumer, 2002; Goudriaan, Wittebrood, and Nieuwbeerta, 2006; Schnebly, 2008). For example, using the National Crime Victimization Survey, Baumer (2002) found that the reporting of simple assault generally increased with neighborhood poverty except at high levels of poverty, where the probability of reporting dropped sharply. In comparison, Goudriaan, Wittebrood, and Nieuwbeerta (2006) observed a negative relationship between crime reporting and neighborhood poverty, but like Baumer they also observed a sharp drop in crime reporting at high levels of poverty.

Some evidence suggests that other structural characteristics, such as mobility (Goudriaan, Wittebrood, and Nieuwbeerta, 2006) and ethnic, racial, or immigrant composition (Schnebly, 2008), also are important for understanding victimization reporting. For example, Goudriaan, Wittebrood, and Nieuwbeerta (2006) found that neighborhood mobility was related negatively to victimization reporting and that the effect of this variable was mediated by neighborhood social cohesion and confidence in the police. Although these studies contain variables that control for the characteristics of the victimization and the demographic traits of the

reporter, they lack measures of individual-level attitudes and experiences related to reporting, including respondent delinquency and contact with and attitudes toward the police.

LINKING THE ATTITUDES AND EXPERIENCES OF YOUTH TO REPORTING INTENTIONS

Compared with neighborhood-level research, more studies have examined the factors that influence an individual's willingness to report crimes and several studies explicitly examine third-party crime reporting. Most of this work has focused on experiences with and attitudes toward the police. Evidence is somewhat mixed regarding whether youths' relations with the police are related to reporting, with qualitative work being more supportive of a relationship (e.g., Rosenfeld, Jacobs, and Wright, 2003; Solis, Portillos, and Brunson, 2009). For example, qualitative work by Carr, Napolitano, and Keating (2007), which sampled youth living in three high-crime neighborhoods, found that less than 10 percent of their sample reported that they would call the police if they saw a group of teens misbehaving and that most had a negative disposition toward law enforcement, primarily because of their own negative experiences or because they perceived the police to be ineffective.

Quantitative research is somewhat less supportive of the hypothesis that attitudes and experiences with the police are related to reporting (e.g., Frank et al., 1996; see Skogan, 1984). This work, which has studied mostly adult samples, generally finds weak associations between attitudes toward the police and willingness to report. Some studies suggest that contact with the police might be more important than attitudes. For example, Davis and Henderson (2003) found that perceptions of police were unrelated to reporting intentions for a sample of mostly immigrant adults. Instead, respondents were more willing to call the police if they had initiated police contact voluntarily in the past and were less willing to report if they had been stopped by the police. Davis and Henderson do not capture whether these interactions with the police were positive or negative; however, perceptions of procedural injustice (i.e., being treated by system agents in an unfair manner) are a key factor in diminishing trust in legal authorities (Tyler, 2006). Moreover, this study did not control for respondents' criminal behavior, which might affect both reporting intentions and police contact.

Significant relationships between delinquency and reporting intentions have been observed in survey data using school samples. Brank et al. (2007) found that self-reported delinquency had a direct effect on willingness to report that a fellow student had a weapon at school. This study, however, failed to consider the role of police contact or attitudes toward the police, which is problematic; youth who engage in delinquency

increase their likelihood of involuntary police contact, which might lead to both negative attitudes toward the police (Cox and Falkenberg, 1987; Leiber, Nalla, and Farnworth, 1998) and an unwillingness to report crime.

Some work suggests that other factors, such as perceptions of crime and disorder and neighborhood safety, might be important for reporting. Individuals who perceive more crime and disorder in their community might be less willing to report because they tend to hold less favorable attitudes toward the police (Cao, Frank, and Cullen, 1996; Hurst, 2007; Hurst and Frank, 2000; Hurst, McDermott, and Thomas, 2005; Reisig and Parks, 2000; Weitzer and Tuch, 2005) or because they withdraw from community life out of fear (Markowitz et al., 2001). Although little work has examined the relationship between access to public services and the willingness to report crime, Davis and Henderson (2003) found respondents said they would be more likely to report crime when they believed that their ethnic community was integrated into the local political structure and that the political structure was responsive to their needs. The belief that the ethnic community could get problems solved also was related positively to the willingness to report.

NEIGHBORHOOD CHARACTERISTICS, ATTITUDES AND EXPERIENCES, AND REPORTING INTENTIONS

A handful of studies have examined how both neighborhood context and individual-level attitudes and experiences affect reporting, although none specifically have examined a respondent's intentions to report crime or youth samples. Triplett, Sun, and Gainey (2005) found that whether respondents believed their neighbors would cooperate with the police was related positively to neighborhood mobility and related negatively to a scale capturing neighborhood disadvantage and residents' perceived alienation from the police. However, after controlling for individual-level faith in the police and social ties, both of which were related positively to cooperation, the association between disadvantage/alienation and cooperation became positive. This study highlights the importance of including adequate individual-level measures to assess how neighborhood characteristics affect reporting, but does not address whether neighborhood context influences reporting by shaping youths' attitudes and experiences (see also Wells et al., 2006).

The lack of studies assessing the joint effects of neighborhood characteristics and individual-level attitudes and experiences represents an important limitation in the reporting literature because research suggests that many individual-level factors associated with reporting vary by neighborhood structural context. For example, citizens' perceptions of the police (Cao, Frank, and Cullen, 1996; Huebner, Schafer, and Bynum, 2004; Reisig and Parks, 2000, 2003; Schafer, Huebner, and Bynum, 2003; Stewart et

al., 2009; Taylor et al., 2001; Weitzer, 1999) as well as police behavior (Smith, 1986) have varied systematically across community contexts.

In summary, research suggests that both neighborhood context and youths' experiences and attitudes, especially with regard to law enforcement and the community, might affect reporting intentions. Yet few studies of reporting have included both neighborhood-level measures and a wide range of variables capturing individual-level attitudes and experiences, such as delinquency, attitudes toward and experiences with the police, and neighborhood perceptions. Moreover, studies examining macrolevel and microlevel correlates of reporting have used primarily adult samples.

THE CURRENT STUDY

Using survey data collected from youth, this study addresses three research questions. First, we examine whether neighborhood structural characteristics, including poverty, racial, ethnic, and immigrant concentrations, and residential mobility, are related to youths' willingness to report crimes they might observe in the community. Second, we investigate whether youths' attitudes and experiences have a significant relationship with the willingness to report crime above and beyond the effects of neighborhood characteristics. We hypothesize that individuals will be less willing to report crimes when they have been stopped by the police and were dissatisfied with their treatment and when they are more involved in delinquency. In contrast, youth will be more willing to report crime when they have been stopped by the police and were satisfied with their treatment, are disposed positively toward the police, believe that youth can play a positive role in their communities, and have knowledge of the types of services available to victims of crime. Finally, we explore whether neighborhood structural characteristics are related to reporting intentions once individual-level attitudes and experiences have been taken into account and whether neighborhood context affects reporting intentions by influencing the attitudes and experiences of youth.

METHODS

DATA

The data used in this study were gathered as part of the National Evaluation of the Teens, Crime, and the Community/Community Works (TCC/CW) program, which is a school-based, law-related education program (Esbensen, 2009). Consistent with the objectives of the program evaluation, a purposive sample of schools offering the targeted program was selected for inclusion in the study. Based on records of program implementation provided by the program national office, more than 250 schools

were identified as offering the program. Eighteen schools met the evaluation criteria, and 15 agreed to participate in the study. The final sample of schools (nine in Arizona, one in New Mexico, two in Massachusetts, and three in South Carolina) reflects the fact that program adoption was more pronounced in Arizona. Because the program was operating primarily in the southwestern United States, Latino youth are overrepresented in this sample, with White youth underrepresented.

The evaluation design included matching of classrooms and agreement to a 4-year study design that included pretest and posttest questionnaire administration during the first year and then three annual follow-up surveys with students. Classrooms were selected based on the grade in which the program was taught (ranging from sixth to ninth grade), and grade-level classrooms were matched by teacher. All students in the selected classrooms (N = 2,353) were asked to participate in the evaluation. Because of the nature of the study, active parental consent was required before students could participate. Consent was obtained for 72 percent of the students (n = 1,686),[3] which is well above other comparable panel studies and is in line with general recommendations for consent rates needed to guard against sample bias (Babbie, 1973; Lueptow et al., 1977; Sewell and Hauser, 1975). Although we have no data on the characteristics of students who did not obtain parental consent for the study, we do know that the demographic characteristics (i.e., sex, race, and ethnicity) of students participating in the evaluation were similar to those of their schools.

Pretest data (wave I) were collected prior to the delivery of the TCC/CW curriculum during the 2004–2005 school year, and posttests (wave II) were completed directly after the program ended, approximately 6 months later. Survey data were collected using group-administered self-report methods, whereby subjects answered questions individually as they were read aloud by members of the research team in the classroom. Wave II data were used in the current analyses because information on students' attitudes toward the police were not measured at wave I and because one of the schools withdrew from the program subsequent to wave II.[4]

3. Twelve percent of parents refused their child's participation, and 16 percent of students failed to return consent forms.

4. Exposure to the program does not influence our results. A process evaluation determined that the program was implemented with insufficient fidelity to have any effect (Melde, Esbensen, and Tusinski, 2006). This implementation failure was so severe that it led to the discontinuation of data collection after analyses of the wave III data. Outcome analyses revealed few differences between the treatment and the control groups, including measures used in the current study (Esbensen, 2009). Moreover, all models in the current study were run including

SAMPLE

Of the 1,686 students who received active parental consent to participate in the study, 1,354 (80 percent) are included in the current study; 188 students are excluded from the analysis because they did not complete wave II. An additional 72 students are dropped because they did not provide a valid address for geocoding, and 10 are excluded because they are missing data on reporting intentions at wave II. Finally, 62 individuals are omitted because of missing data on one or more of the independent variables.[5]

Descriptive statistics for the final sample are presented in table 1. Most students in our sample are Latino (43 percent), whereas 33 percent are White and 11 percent are Black. On average, the students are almost 13 years old, and 17 percent live in single parent homes. Most students have at least one parent whose highest level of education is a high-school degree (39 percent) or who, at a minimum, have attended some college (38 percent).

Approximately 34 percent of the sample live in census tracts in which more than 50 percent of the population is Latino, whereas only approximately 4 percent live in tracts that are more than 50 percent Black (not shown). The percent of the population living in the youths' census tract that is foreign born varies widely from a low of 0 percent to a high of 48 percent, with a mean of 14 percent. Youth in the sample reside in census tracts in which, on average, 17 percent of the population lives in poverty and 4 percent of households receive public assistance.[6]

VARIABLES

A complete list of all items contained in each scale as well as scale reliabilities can be found in appendix A. Appendix B provides the correlation matrix of the key individual-level variables. Except where noted,

controls for program participation. In none of the models was this variable significant, and its inclusion did not affect the substantive results of the analyses presented here.

5. Attrition analyses indicated that compared with the sample of youth who returned the informed consent form, the analysis sample comprised slightly greater percentages of females, youth residing with both parents, and youth whose parents had completed less education. Additionally, youth analyzed viewed victimization as more likely than youth not analyzed. No differences were found for other variables used in the analysis. Therefore, despite the relatively low attrition rate, findings might be biased by selective attrition, a common problem in longitudinal research.
6. Nationally, 12 percent of the population lives in poverty and 3 percent of households receive public assistance (U.S. Census Bureau, 2000). This figure suggests that the study oversampled youth living in more disadvantaged neighborhoods.

Table 1. Sample Characteristics and Descriptive Statistics (*N* = 1,354 Students Nested within 137 Census Tracts)

Variables	Percent (Mean)	SD	Range	Factor Loading
Demographic measures				
Race				
Latino	42.91			
White	32.94			
Black	11.30			
Other	12.85			
Female	55.17			
Single-parent household	17.43			
Highest level of education completed by either parent				
Less than high school	9.90			
High-school degree only	38.99			
Some college or more	37.74			
Missing	13.37			
Age	(12.69)	1.03		
Attitudes, experiences, and perceptions				
Delinquency (variety score)	(2.00)	2.62	1.00–15.00	
Likelihood of being victimized in the community (α = .87)	(2.13)	.96	1.00–5.00	
Perceptions of community crime and disorder (α = .82)	(1.77)	.51	1.00–3.00	
Role of youth in the community (α = .70)	(3.15)	.64	1.00–5.00	
Awareness of services (α = .77)	(3.67)	.76	1.00–5.00	
Positive attitudes toward the police (α = .90)	(3.57)	.89	1.00–5.00	
Experiences with the police				
Stopped or arrested and satisfied with treatment	4.95			
Stopped or arrested and neither satisfied nor dissatisfied with treatment	7.02			
Stopped or arrested and dissatisfied with treatment	7.98			
Stopped or arrested and missing data on treatment	7.75			
Neighborhood characteristics				
Poverty (α = .79)				
Percent of households that receive public assistance	(3.99)	3.08	.00–17.09	.84
Percent of population in poverty	(16.63)	8.97	.76–48.77	.84
Percent of households headed by a single female with child < 18 years	(9.92)	4.79	.17–26.95	.83
Percent of population age 16 years and older that is unemployed	(3.99)	2.02	.00–13.63	.69
Latino/immigrant concentration (α = .65)				
Percent Latino	(33.76)	28.34	.38–90.54	.80
Percent foreign-born	(14.06)	9.44	.00–48.31	.72
Percent Black	(9.66)	16.58	.13–98.83	
Residential mobility	(48.48)	10.42	21.28–97.95	

ABBREVIATION: SD = standard deviation.

scales are mean score scales and were constructed by computing the average score for all nonmissing items in the scale for individuals who responded to at least half of the items.

Dependent Variable—Reporting Intentions

Youths' likelihood of reporting delinquent behaviors that they hypothetically might observe in the community is measured at wave II with three questions, each of which taps a different type of offense. Students were asked to indicate how likely they would be to report someone 1) breaking into a home in their community, 2) beating up a stranger on the street, and 3) stealing something from a store. Responses range from 1 (not at all likely) to 5 (very likely). The distribution of responses for all three crime types is presented in table 2. Most youth are likely or are very likely to report burglary (62 percent), followed by beating of a stranger on the street (50 percent) and stealing from a store (45 percent). However, a substantial percentage of youth are not at all likely to report crimes they might observe; the percent of students unlikely to report ranges from 19 percent for breaking into a home to 26 percent for stealing from a store.

Table 2. Reporting Intentions: Percent of Youth Likely to Report a Crime by Crime Type (*N* = 1,354)

	Breaking Into a Home	Beating Up a Stranger	Stealing from a Store
Not at all likely	18.7	22.4	26.2
A little likely	8.3	11.3	13.3
Somewhat likely	11.3	16.2	15.5
Likely	23.6	23.9	21.0
Very likely	38.1	26.3	24.0

NOTE: Column percentages total more than 100 percent due to rounding.

For the multivariate analyses, the three items were combined into a mean score scale. Diagnostics indicate that the scale was not distributed normally, which makes ordinary least-squares (OLS) regression problematic. Therefore, the decision was made to convert the mean scores back into an ordinal scale with five categories and to use ordered logistic regression to analyze the data.[7]

7. To be consistent with the original item scaling, the breakpoints were created to produce five equal categories. Individuals with average scores 1.00–1.80 are considered "not at all likely" to report; 1.81–2.60 are "a little likely"; 2.61–3.40 are "somewhat likely"; 3.41–4.20 are "likely"; and 4.21–5.00 are "very likely." Results using the mean score scale and hierarchical linear regression are substantively the same as those presented here.

Neighborhood Context

At the second wave of data collection, students were asked to provide their addresses, and this information was used to obtain tract-level data from the 2000 U.S. Census.[8] Measures of neighborhood structure were constructed from these data based on principal factor analysis (varimax rotation) at the neighborhood level and were guided by theoretical considerations. The following variables load onto a factor that captures neighborhood *poverty* (factor loadings are in parentheses): percent of households that received public assistance (.84), percent of population in poverty (.84), percent of households headed by a single female with a child less than 18 years old (.83), and percent of population age 16 years and older that is unemployed (.69). Consistent with the work of others (e.g., Sampson, Raudenbush, and Earls, 1997), percent Latino (.80) and percent foreign born (.72) load onto one factor, *Latino/immigrant concentration*. Based on these results, we computed measures of neighborhood poverty and Latino/immigrant concentration by standardizing the individual items in each factor and summing them.[9] Although many measures of neighborhood disadvantage include the percent of the population that is Black, this item did not load on our poverty index. Therefore, *percent Black* is included as a single-item measure. *Residential mobility,* which is the percent of the population ages 5 years and older living in a different house from 5 years ago, is also measured with a single item.

Individual-Level Variables

Measures of the youths' attitudes and experiences were constructed using the survey data from wave II. Variables capturing youths' *treatment when stopped or arrested by the police* were created using a series of questions that asked whether respondents had ever been stopped by the police for questioning or had been arrested and, if so, their level of satisfaction with their treatment.[10] Level of satisfaction was recoded into three dichotomous variables—dissatisfied or very dissatisfied, neither dissatisfied nor

8. Census tracts are created by the U.S. Census Bureau and represent neighborhood boundaries as perceived by local residents (Brooks-Gunn et al., 1993). Although considerable debate has developed regarding the operationalization of neighborhoods, census tracts are relatively homogenous areas and have been used extensively in neighborhood research (Haynie, Silver, and Teasdale, 2006).

9. To assess whether the results are sensitive to the methods used to create the factor scores, we also computed factor regression scores for neighborhood poverty and Latino/immigrant concentration by weighting each item by its factor score. Results were substantively similar to those presented here.

10. Approximately 26 percent of the sample had been stopped by the police for questioning, and 7 percent had been arrested.

satisfied, and satisfied or very satisfied.[11] In the multivariate analysis, the comparison group consists of students who have not been stopped or arrested by the police. Attitudes toward the police are not always rooted in personal experiences; therefore, we also include a measure that captures *positive attitudes toward the police*. Students who score high on this five-item scale reported that police officers are honest, hardworking, friendly, courteous, and respectful toward people like the student. In addition, because students who are more involved in *delinquency* might be more likely to come in contact with the police and more reluctant to report crimes, we include a 15-item variety score that captures the number of different delinquent activities in which the respondent reported ever engaging.[12]

Above and beyond their relations with the police and involvement in delinquency, youth who feel unsafe in their neighborhoods might be less willing to report crime because they believe the police or other adults cannot protect them from potential retaliation. For this reason, we include a variable, *likelihood of victimization in the community,* which measures youths' perceptions regarding their likelihood of experiencing five different types of victimizations. These victimizations range from having their house broken into while they are away to being attacked by someone with a weapon.

Reporting intentions also might be influenced by how youth perceive their community and their role in it. When youth believe that their community is rundown and dangerous, they might see little reason to report crime. Therefore, we include a variable that captures youths' *perceptions of neighborhood crime and disorder*, which encompasses seven different forms of crime and disorder, ranging from relatively minor forms of disorder such as rundown and poorly kept buildings to more serious violence, like gunshots in the neighborhood.

11. Of the students who reported being stopped or arrested, 105 did not report their level of satisfaction with the police. Therefore, we retained these students in the sample and included in the analysis a dichotomous variable scored 1 if the respondent had been stopped or arrested but failed to report their satisfaction with the police and scored 0 otherwise. This coding decision treats those with missing data on this variable as a distinct group and enables us to estimate differences in reporting intentions between those who were never stopped and the following groups: those who were stopped and were 1) satisfied, 2) dissatisfied, 3) neither satisfied nor dissatisfied, and 4) missing data regarding their level of satisfaction. The variable *stopped but missing data on treatment by the police* was not significant and is omitted from the results table to save space.

12. We checked the robustness of our results by reestimating the models using several alternative measures of delinquency including variables that capture frequency of offending, serious offending only, and offending in the last 3 months. In all cases, the substantive results remained the same.

In contrast, youth might be more willing to report crime when they believe that they can make a meaningful contribution to community life. Thus, we include a measure of youths' perceived *role in the community*. Youth who score high on this six-item scale believe that teenagers can make a difference in improving the community, adults encourage youth participation in neighborhood activities, and youth take an active role in the community. They also believe that it is their responsibility to do something about community problems and that their personal actions can change the community and the lives of others.

Finally, *awareness of services* might increase the likelihood of reporting by augmenting confidence in system actors, signaling that crime is something to be taken seriously, and enhancing access to community resources. Therefore, a four-item scale is included that measures the extent to which respondents are aware of people or programs that can help individuals in need, including victims of crime.

Control Variables

Several control variables that likely affect reporting are included in the models. We include variables measuring age and gender, which have been related to reporting. In addition, because many of our key independent variables, including attitudes and experiences with the police, vary by race and ethnicity (Triplett, Sun, and Gainey, 2005; Weitzer and Tuch, 2005), we also include a series of dichotomous variables that indicate whether the respondent is Latino, Black, or another non-White race/ethnicity (with White as the reference group).

Finally, two measures are included to control for individual socioeconomic status (SES). First, household structure is measured using a dichotomous variable scored 1 if the respondent lived in a single-parent household and 0 otherwise. Second, parental education is coded using the highest level of education completed by either of the respondent's parents. It is measured with three binary variables coded as less than a high-school education, attended college, and completed high school only, with the final variable serving as the reference category. Approximately 13 percent of the sample could not report the highest level of education completed by either parent at any of the waves of data collection. We retain these individuals in the analysis and include a fourth dummy variable to indicate that information on education is missing.[13] This level of missing data is not unusual given the difficulty of measuring SES using youth reports. Youth generally do not have access to information on their parents' income and

13. This variable was not significant in any of the multivariate models. The results for this variable were omitted from table 3 to save room.

often do not know how much education their parents have completed (Curry et al., 1997).

ANALYTIC STRATEGY

The students in our sample reside in 137 different census tracts.[14] Because of the nested nature of the data, our observations are not independent from one another. When this key assumption of OLS regression is violated, coefficient estimates will be consistent (i.e., unbiased), but standard errors are no longer valid (Rabe-Hesketh and Skrondal, 2008). For this reason, we estimate multilevel models with random intercepts. These models take into account the clustered nature of the data and provide accurate estimates of standard errors. They assume that student responses are conditionally independent given the random intercept, higher level variables (i.e., neighborhoods), and individual-level explanatory variables (Rabe-Hesketh and Skrondal, 2008). Because our outcome is ordinal, we estimate hierarchical-ordered logistic regression models.[15]

In addition to being nested in neighborhoods, the students also are nested in schools.[16] To the extent that schools share the characteristics of the neighborhoods from which they draw their students, estimates of neighborhood effects are likely to be inflated if the school context is not accounted for (Cook, 2003). Therefore, in all analyses, we include a series of dummy variables to control for the school the student attended. Including "fixed effects" for schools enables us to estimate the effect of neighborhood-level variables above and beyond the effect of schools and controls for differences in school composition. By including these school-fixed effects, we are estimating the effect of neighborhood context and individual-level factors on reporting *within* schools. This analysis provides a rigorous test of the relationship between neighborhood context and reporting because any variation in reporting that is explained by the overlap of school and neighborhood characteristics will be attributed to schools.[17]

14. The number of students per census tract ranges from 1 to 68 with an average of 10. Approximately 3 percent of students reside in tracts in which they are the only survey participant, and approximately 28 percent of the census tracts have only one student.
15. Maximum likelihood models with adaptive quadrature are estimated using the generalized linear latent and mixed models (gllamm) command in Stata (Rabe-Hesketh and Skrondal, 2008).
16. The number of students attending each of the 15 study schools ranges from 27 to 191, with an average of 90 students surveyed from each school.
17. Students also were nested in classrooms within schools. To explore whether this additional level of nesting is cause for concern, we examined whether reporting intentions varied significantly across classrooms conditional on the school the respondent attended by estimating a random intercept model with students

To assess the relationship among neighborhood context, individual-level factors, and the likelihood of reporting, we estimate a series of regression models. We first regress reporting intentions on our measures of neighborhood context and explore the possibility that the effect of neighborhood context might be nonlinear. Next, we regress reporting intentions on the neighborhood structural variables and our demographic control variables to assess whether any observed neighborhood effects can be accounted for by the demographic characteristics of the students. In the final model, we add measures of individual-level attitudes and experiences to determine to what extent neighborhood context matters above and beyond the attitudes and experiences of youth. We then conduct supplemental analyses that further assess whether attitudes and experiences mediate the effects of neighborhood context on reporting intentions.

RESULTS

We first examine the relationship between contextual variables and the willingness to report crime by regressing the reporting intentions on neighborhood characteristics and 14 dichotomous school identification variables. These results are presented in model 1 of table 3 (school estimates are not shown).[18] We find that youth living in higher poverty neighborhoods are less willing to report crime they might observe in the community; however, none of the other neighborhood measures are significantly related to reporting. Although not shown in the table because of space constraints, several school variables are significant, which indicates that youths' willingness to report crime varies across schools. Poverty was squared and then added to model 1 (not shown) to assess nonlinearity. This quadratic term was not significant, which suggests that in our sample reporting intentions has a linear association with neighborhood poverty.

Next, we regress reporting intentions on neighborhood characteristics, school control variables, and individual-level demographic measures to determine whether neighborhood structural context matters net of youth demographic characteristics (model 2, table 3). We find that the sociodemographic variables operate in a manner that is consistent with past research on youths' reporting intentions (e.g., Brank et al., 2007). Females

nested in classrooms. We found that reporting intentions did not vary significantly between classrooms ($\alpha = .05$). To explore this issue further, we reestimated the gllamm models using robust standard errors based on the sandwich estimator. These estimates do not rely on the model being specified properly or on the model residuals being independent of one another (Rabe-Hesketh and Skrondal, 2008). Our results (available upon request) were substantively the same as those presented in the article.

18. The coefficient estimates for the school variables and the results from all supplemental analyses are available by request from the first author.

and younger students are more willing to report than males and older students. Blacks and Latinos are significantly less willing to report than Whites. Individual SES does not have a significant effect on reporting. The addition of these control variables slightly reduces, but does not eliminate, the effect of neighborhood poverty on reporting intentions; the size of the poverty coefficient is reduced by 4 percent from $b = -.053$ to $b = -.050$.

Finally, measures of individual-level attitudes and experiences are added to the model to explore the individual-level correlates of reporting intentions (model 3, table 3). In addition, this model enables us to assess whether neighborhood characteristics influence reporting likelihood above and beyond attitudes and experiences. As predicted, youth who are more delinquent are significantly less willing to report crime. Furthermore, youth who have more favorable attitudes toward the police are significantly more willing to report crime. In contrast, actual experiences with the police do not have an independent effect on reporting intentions, regardless of whether those experiences are positive or negative.[19] Youths' self-reported risk of victimization also emerges as a significant predictor of reporting intentions; however, contrary to our hypothesis, youth who believe they have a greater likelihood of being victimized are more willing to report crime. Finally, both awareness of victim services and a view that youth are valuable members of the community are related positively to reporting. In contrast, youths' perceptions of neighborhood crime and disorder are unrelated to reporting intentions.

Importantly, the inclusion of individual attitudes and experiences reduces the association between neighborhood poverty and reporting by more than 25 percent from model 2, and poverty is no longer significant ($b = -.038$). This finding suggests that to the extent that neighborhoods influence the attitudes and experiences of youth, these individual-level characteristics mediate the relationship between neighborhood poverty and reporting. We conduct additional analyses to assess these potential mediation effects more formally. According to Baron and Kenny (1986), the following necessary conditions must be satisfied to claim a mediation effect exists: 1) the mediator must have a significant relationship with the dependent variable of interest; 2) the exogenous variable must have a significant relationship with the mediator; and 3) the relationship between the exogenous variable and the outcome must be attenuated when the mediator is added to the model.

19. We also ran analyses including variables that captured whether the student had reported being victimized to the police and, if so, their level of satisfaction with this interaction. None of these variables were significant, and the inclusion of these variables did not change the substantive results presented here.

Table 3. Reporting Intentions Regressed on Neighborhood Context, Demographic Variables, and Attitudes and Experiences (*N* = 1,354), Multilevel Ordered Logistic Regressing Using a Random Intercept Model

	Model 1[a]		Model 2[a]		Model 3[a]	
Variables	***b***	**SE**	***b***	**SE**	***b***	**SE**
Neighborhood context						
Poverty	–.053*	(.025)	–.050*	(.025)	–.038	(.026)
Latino/immigrant concentration	.091	(.061)	.093	(.062)	.056	(.064)
Percent Black	–.008	(.005)	–.005	(.005)	–.006	(.006)
Mobility	.001	(.006)	.001	(.006)	.000	(.006)
Demographic variables						
Black			–.443*	(.207)	–.441*	(.210)
Latino			–.355*	(.155)	–.195	(.160)
Other race			–.139	(.179)	–.078	(.185)
Female			.399**	(.100)	.245*	(.105)
Age			–.338**	(.085)	–.213*	(.088)
Single-parent household			–.139	(.133)	–.085	(.136)
Parental education—less than high school			–.332	(.180)	–.314	(.186)
Parental education—post–high-school education			–.037	(.118)	–.117	(.120)
Experiences, attitudes, and perceptions						
Treatment by police						
Stopped or arrested and satisfied					.376	(.235)
Stopped or arrested and neither satisfied nor dissatisfied					.070	(.199)
Stopped or arrested and dissatisfied					–.184	(.209)
Positive attitudes toward the police					.331***	(.072)
Delinquency					–.082**	(.025)
Likelihood of victimization					.325***	(.059)
Perceptions of community disorder					–.210	(.118)
Role of youth in the community					.508***	(.097)
Awareness of services					.384***	(.079)

ABBREVIATION: SE = standard error.

[a]Includes dummy variables for schools, but results are not shown. Available from first author by request.

*$p < .05$; **$p < .01$; ***$p < .001$.

Analyses presented thus far indicate five variables—attitudes toward the police, delinquency, perceived victimization risk, awareness of services, and perceived role of youth in the community—satisfy the first of these criteria and therefore potentially might mediate the effect of neighborhood poverty on reporting. To determine whether these variables also satisfy the second criteria, we regress neighborhood poverty on each of these potential mediators (see table 4), controlling for the school that the respondent attended. Clustering in neighborhoods, again, is accounted for using random-effects models.

Table 4. Regression of Neighborhood Poverty on Potential Mediators, Random Intercept Models (N = 1,354)[a]

	Effect of Poverty on Each Potential Mediator	
	b	**SE**
Positive attitudes toward the police	–.026*	(.011)
Delinquency	.082*	(.033)
Likelihood of victimization	.020*	(.010)
Role of youth in the community	–.012	(.007)
Awareness of services	.008	(.015)

[a]School fixed-effects estimated but not shown.
*$p < .05$.

Results from these supplemental analyses indicate that neighborhood poverty is associated significantly with multiple individual-level attitudes and experiences. Specifically, in more impoverished neighborhoods, respondents engage in higher levels of delinquency and are less likely to hold positive attitudes toward the police. In addition, perceived victimization risk is related positively to neighborhood poverty. Neither the role of youth in the community nor the awareness of services is related to poverty. These results suggest that neighborhood poverty might affect reporting intentions via its relationship with delinquency, attitudes toward the police, and perceptions of victimization risk.

Additional analyses were performed to determine which of the three potential mediators that had a significant relationship with poverty attenuated the relationship between neighborhood poverty and reporting. Each of the potential mediators was entered by itself into model 2 in table 3 (the baseline model). These analyses indicate that the addition of any one of these variables (i.e., attitudes toward the police, respondent delinquency, or perceived victimization risk) reduced the effect of neighborhood poverty on reporting to nonsignificance, with attitudes toward the police

responsible for the largest reduction in the neighborhood poverty coefficient (12 percent) followed by delinquency (10 percent) and perceived victimization risk (2 percent).

Combined, the supplemental analyses indicate that three variables—attitudes toward the police, delinquency, and perceived victimization risk—satisfy all three criteria for mediation. This finding suggests that youth living in a high-poverty neighborhood are more likely to hold negative attitudes toward the police and are more likely to engage in delinquency, which decreases their willingness to report crime they might observe. At the same time, youth living in more impoverished neighborhoods believe that they have a higher risk of being victimized, which is associated with a greater willingness to report crime. Other individual-level variables, such as awareness of services and perceptions of youths' role in the community, affect reporting, but they do not mediate the effect of poverty, per se, on this outcome.

DISCUSSION

Researchers have recognized for a long time that citizens play a critical role in the coproduction of crime statistics and of social order. More recently, the publicity of the "stop snitching" movement has sparked a renewed interest in studying the factors related to citizens' willingness to report crimes. Prior quantitative studies of reporting can be divided into two general camps: 1) those that focus on the neighborhood correlates of victimization reporting but include few individual-level factors aside from demographics and characteristics of the crime, and 2) those that consider a more extensive range of individual-level attitudes and experiences but fail to assess the role of context. The purpose of the current work is to join these two lines of research to identify the neighborhood and individual factors that affect intentions to report crime and to understand the process through which context and experiences shape these intentions. Importantly, unlike most work examining this issue, we focus on youth—a group disproportionately affected by crime yet the least likely to report it (Watkins, 2005).

We first examined the relationship between neighborhood structural characteristics and reporting intentions while controlling for the school that the respondent attended. Controlling for the school context provides a stronger and more conservative test of neighborhood effects than studies that do not control for multiple contexts. We found that neighborhood poverty is related negatively to youths' willingness to report crime and that the relationship between these variables is linear. This finding differs from some research (Baumer, 2002; Goudriaan, Wittebrood, and Nieuwbeerta, 2006; Warner, 2007; but see Schnebly, 2008), which has

found a curvilinear association between neighborhood disadvantage and reporting. This difference in findings might result from our unique focus on youth. Some have argued that the observed curvilinear relationship reflects the fact that individuals living in the wealthiest and poorest neighborhoods use methods aside from seeking police intervention to solve problems and settle disputes (Baumer, 2002; Warner, 2007). For example, Warner (2007) suggested that residents living in neighborhoods at both ends of the poverty spectrum might deal with disputes by engaging in forms of self-help, including retaliation. Others argued that both wealthy and extremely disadvantaged neighborhoods consist of dense social networks that residents can call on to solve social problems instead of invoking formal social control (e.g., Baumer, 2002; Pattillo, 1998; Portes, 2000). If these explanations are true, then we would not necessarily expect them to apply to youth, who might not be able to intervene actively. It also is possible that the divergence is a result of methodological differences across studies in terms of sampling and the outcome of interest (reporting behavior vs. reporting intentions). Additional data are needed to assess which of these explanations is accurate.

Contrary to work that highlights strained relationships between both African American and immigrant Latino communities and the police (e.g., Brunson, 2007; Menjívar and Bejarano, 2004; Solis, Portillos, and Brunson, 2009), we found that mobility as well as racial and ethnic/immigrant concentrations were not related to reporting intentions. It is possible that neighborhood poverty is more important than racial/ethnic composition for understanding reporting, something that has been found in other studies (see Goudriaan, Wittebrood, and Nieuwbeerta, 2006; Triplett, Sun, and Gainey, 2005). However, our data might not be well suited for examining the effects of racial composition, given that we had few youth ($n = 52$) who live in neighborhoods where more than 50 percent of the population is Black.

Next, we examined the effect of youths' experiences and attitudes on their willingness to report, net of their demographic and neighborhood characteristics. Several important findings emerged. First, our results illustrate that delinquency is related negatively to reporting intentions. Although we do not explore the reasons why youth involved in more delinquency are less willing to report crime, it is possible that they are concerned with drawing attention to their own delinquent behavior or to the delinquent behavior of others in their peer group (see Rosenfeld, Jacobs, and Wright, 2003; Wright and Decker, 1997). Future research should explore these ideas.

Second, we found that youths' likelihood of reporting increases with more favorable attitudes toward law enforcement. However, contrary to past research (e.g., Davis and Henderson, 2003), we found that individuals

who are dissatisfied with their treatment by the police are no less willing to report than those who had no police-initiated contact. One possible explanation for the divergence is that past studies have failed to control for the respondents' own involvement in delinquency. Supplemental analyses support this explanation. When we reanalyzed the full model omitting measures of the youths' self-reported delinquency, the effect of negative treatment by the police on reporting more than doubled from –.184 to –.378 and approached traditional levels of significance (p = .059). This finding suggests that the relationship between being stopped by the police and reporting intentions might be inflated in studies that fail to take into account the reporter's own behavior. In addition, the results suggest that how people perceive the police might be more important than how police actually behave when stopping or arresting youth. Perceptions of police certainly are shaped by actual experiences, but also they are affected by the attitudes and experiences of people with whom the youth interacts (Menjívar and Bejarano, 2004). Still, our findings should be viewed as preliminary given that our measure of satisfaction was missing data for approximately 28 percent of the youth who reported being stopped or arrested.

Third, based on snitching and retaliatory violence research, we hypothesized that youth who believe they have a greater likelihood of being victimized would be less willing to report crime because they have little faith that the police or other authorities could keep them safe. In contrast to our expectations, we found that perceived victimization risk is associated positively with willingness to report. This unexpected finding might result from our unique focus on youth in their early teens. Unlike older high-risk youth, our relatively young respondents might believe that the best way to enhance their personal safety is to report crime. Therefore, independent of their attitudes toward the police, youth at this age still might feel that the police and other authority figures can protect them. In some ways, our results are not inconsistent with past research that has found that even individuals who hold negative attitudes toward the police and are generally unwilling to elicit their help also believe that the police are necessary to control crime (e.g., Brunson, 2007; Carr, Napolitano, and Keating, 2007; Rosenfeld, Jacobs, and Wright, 2003).[20] Again, our findings highlight the importance of studying youth separate from adults. In addition, they suggest that it will be important for researchers to explore how intentions to

20. In supplemental analyses, we explored this relationship in greater detail using a victimization measure that referred exclusively to violent acts. Results affirmed the positive relationship between youth's perceived risk of victimization and willingness to report. It is possible, however, that a measure specifically designed to assess fear of retaliatory violence might be related negatively to reporting.

report crime change as youth age and the factors that lead youth to lose faith in the ability of the police and others to protect them.

Finally, both the awareness of services to help victims of crime and the view that youth are valuable members of the community also are related significantly to reporting in the expected direction. Although few studies have examined these factors directly as they relate to crime reporting, these findings have many potential explanations. Convincing youth that they can play an important role in improving their communities might provide a sense of responsibility and empowerment. Youth who feel integrated into the community and that they are working with—not against—neighborhood adults to improve community life might be more willing to help others. Similarly, when youth are aware of services that help victims of crime, it provides concrete evidence that things *can* be done and that crime is taken seriously by the community. The significance of these measures also might reflect the fact that individuals who perceive a positive role for youth in the community and who have knowledge of victim assistance services have someone to whom they can report community crimes, aside from the police. These findings suggest that programs that simultaneously integrate youth into the community and make them aware of community services could enhance reporting. For example, students could be encouraged to volunteer in the community in exchange for school credit through service-learning programs.

It is important to note that our data do not contain neighborhood-level measures of many of our key individual-level variables, including crime and victimization rates as well as collective efficacy. As a result, to the extent that neighborhood characteristics are associated with individual-level factors, we might be attributing to individuals some variation in reporting that could be explained by neighborhood-level factors. For example, we conclude that individual-level perceptions of victimization risk are associated with reporting intentions; yet these perceptions are shaped in part by differences across people in how they perceive risk as well as neighborhood differences in crime and victimization. This issue also holds true for other variables that capture individual-level perceptions of neighborhood characteristics, such as a youth's role in the community and his or her awareness of services. This problem is not unique to our study. Because individual-level constructs are usually easier to define and measure, much multilevel research is biased against neighborhood effects (Diez Roux, 2001). Therefore, as data become available, additional work should be conducted using a broader range of contextual variables.

In addition to assessing the relationship among neighborhood characteristics, individual-level experiences and attitudes, and the willingness to

report crime, we also examined whether the effects of neighborhood characteristics were mediated by a youth's attitudes and experiences. Neighborhood poverty has been linked to numerous negative outcomes; yet relatively few studies have attempted to link macrolevels and microlevels of analysis to understand the process through which neighborhood context shapes reporting intentions. Our findings suggest that neighborhood poverty might affect reporting through its influence on several individual-level measures. Specifically, attitudes toward the police, delinquency, and perceptions of victimization risk satisfied all three criteria necessary to demonstrate mediation effects. These results suggest that in neighborhoods with higher levels of poverty, youth tend to hold more negative attitudes toward the police and engage in more delinquency, which inhibits their willingness to report crimes they might observe. At the same time, neighborhood poverty is associated with higher levels of perceived victimization risk, which tends to enhance a youth's likelihood of reporting.

Understanding the mechanism through which neighborhood context affects reporting has both theoretical and practical implications. For example, many theories hypothesize a link between reporting and poverty; yet they differ in how they explain this link. Our results are most consistent with theories that link poverty to reporting via negative attitudes toward the police and the development of delinquency. Practically, understanding the process through which neighborhood structural characteristics affect reporting offers insights into the types of interventions that can be implemented to disrupt this link and the limitations of these programs. Specifically, programs that foster positive relations between youth and the police and that integrate youth into the community might enhance reporting in poor communities; yet the effectiveness of these programs might be limited to the extent that they fail to address a youth's involvement in delinquency.

As is the case with many studies, our research does not use a nationally representative sample, and although every effort was made to survey all students in the original sample, there is evidence of selective attrition. This outcome limits the generalizability of the results. In addition, because we do not have many students nested within each neighborhood, we cannot distinguish true contextual effects from those caused by differences in the composition of neighborhoods. Although our data have several strengths, including a racially and ethnically diverse sample and detailed measures of individuals' attitudes and experiences, which enable us to examine aspects of reporting that cannot be explored with current nationally representative data sets, it will be important for researchers to replicate our results.

Despite these limitations, the work presented here suggests several important avenues for future study. Although not the focus of our work, we found that reporting intentions varied across schools after controlling

for neighborhood context. Therefore, future research should take a broader ecological approach (Bronfenbrenner, 1979) and examine how neighborhood and school characteristics operate in conjunction to affect reporting intentions. In addition, evidence suggests that the effects of individual characteristics on reporting might vary across neighborhood contexts (Baumer, 2002). Additional efforts should be made to understand the contexts in which certain individual-level attitudes and experiences are more salient for understanding reporting. For example, in neighborhoods high in poverty, delinquency might have a stronger negative association with reporting because the costs of reporting, in terms of potential retaliation or of having a community member face formal sanctions, might be higher. Research on these issues will provide a more complete picture of the macrolevel and microlevel factors that influence youths' reporting intentions.

REFERENCES

Anderson, Elijah. 1990. *Streetwise: Race, Class, and Change in an Urban Community*. Chicago, IL: University of Chicago Press.

Anderson, Elijah. 1994. The code of the streets. *The Atlantic Monthly* 273:80–94.

Anderson, Elijah. 1999. *Code of the Street: Decency, Violence, and the Moral Life of the Inner City*. New York: W.W. Norton.

Babbie, Earl R. 1973. *Survey Research Methods*. Belmont, CA: Wadsworth.

Baron, Reuben M., and David A. Kenny. 1986. The moderator-mediator variable distinction in social psychological research: Conceptual, strategic, and statistical considerations. *Journal of Personality and Social Psychology* 51:1173–82.

Bass, Sandra. 2001a. Out of place: Petit apartheid and the police. In *Petit Apartheid in the U.S. Criminal Justice System*, eds. Dragan Milovanovic and Katherine K. Russell. Durham, NC: Carolina Academic Press.

Bass, Sandra. 2001b. Policing space, policing race: Social control imperatives and police discretionary decisions. *Social Justice* 28:156–76.

Baumer, Eric P. 2002. Neighborhood disadvantage and police notification by victims of violence. *Criminology* 40:579–616.

Baumer, Eric P., and Janet L. Lauritsen. 2010. Reporting crime to the police, 1973–2005: A multivariate analysis of long-term trends in the NCS and NCVS. *Criminology* 48:131–85.

Bickman, Leonard, and Helen Helwig. 1979. Bystander reporting of a crime: The impact of incentives. *Criminology* 17:283–300.

Brank, Eve M., Jennifer L. Woolard, Veda E. Brown, Mark Fondacaro, Jennifer L. Luescher, Ramona G. Chinn, and Scott A. Miller. 2007. Will they tell? Weapons reporting by middle-school youth. *Youth Violence and Juvenile Justice* 5:125–46.

Bronfenbrenner, Urie. 1979. *The Ecology of Human Development: Experiments by Nature and Design*. Cambridge, MA: Harvard University Press.

Brooks-Gunn, Jeanne, Greg J. Duncan, Pamela Kato Klebanov, and Naomi Sealand. 1993. Do neighborhoods influence child and adolescent development? *American Journal of Sociology* 99:353–95.

Brunson, Rod K. 2007. Police don't like Black people: African-American young men's accumulated police experiences. *Criminology & Public Policy* 6:71–102.

Bursik, Robert J., Jr., and Harold G. Grasmick. 1993. *Neighborhoods and Crime: The Dimensions of Effective Community Control*. San Francisco, CA: Lexington Books.

Cao, Linqun, James Frank, and Francis T. Cullen. 1996. Race, community context and confidence in the police. *American Journal of Police* 15:3–22.

2004. Carmelo Anthony featured in drug video. *The Denver Channel*. http://www.thedenverchannel.com/sports/3967329/detail.html.

Carr, Patrick J., Laura Napolitano, and Jessica Keating. 2007. We never call the cops and here is why: A qualitative examination of legal cynicism in three Philadelphia neighborhoods. *Criminology* 45:445–80.

Cook, Thomas D. 2003. The case for studying multiple contexts simultaneously. *Addiction* 98:151–5.

Cox, Terry C., and Steven D. Falkenberg. 1987. Adolescents' attitudes toward police: An emphasis on interactions between the delinquency measures of alcohol and marijuana, police contacts and attitudes. *American Journal of Police* 6:45–62.

Curry, Candace E., Rob A. Elton, Joanna Todd, and Stephen Platt. 1997. Indicators of socioeconomic status for adolescents: The WHO Health Behaviour in School-aged Children Survey. *Health Education Research: Theory & Practice* 12:385–97.

Davis, Robert C., and Nicole J. Henderson. 2003. Willingness to report crimes: The role of ethnic group membership and community efficacy. *Crime and Delinquency* 49:564–80.

Diez Roux, Ana V. 2001. Investigating neighborhood and area effects on health. *American Journal of Public Health* 91:1783–9.

Esbensen, Finn-Aage. 2009. *Final Report: Evaluation of the Teens, Crime and the Community/Community Works Program*. Washington, DC: U.S. Department of Justice, Office of Justice Programs, National Institute of Justice.

Finkelhor, David, and Richard K. Ormrod. 2001. Factors in the underreporting of crimes against juveniles. *Child Maltreatment* 6:219–29.

Frank, James, Steven G. Brandl, Robert E. Worden, and Timothy S. Bynum. 1996. Citizen involvement in the coproduction of police outputs. *Journal of Crime and Justice* 19:1–30.

Gottfredson, Michael R., and Michael J. Hindelang. 1979. A study of the behavior of law. *American Sociological Review* 44:3–18.

Goudriaan, Heike, Karin Wittebrood, and Paul Nieuwbeerta. 2006. Neighbourhood characteristics and reporting crime. *British Journal of Criminology* 46:719–42.

Hawkins, Darnell F. 1987. Beyond anomalies: Rethinking the conflict perspective on race and criminal punishment. *Social Forces* 65:719–45.

Haynie, Dana L., Eric Silver, and Brent Teasdale. 2006. Neighborhood characteristics, peer networks, and adolescent violence. *Journal of Quantitative Criminology* 22:147–69.

Huebner, Beth M., Joseph A. Schafer, and Timothy S. Bynum. 2004. African American and white citizens' perceptions of police service: Within- and between-group variation. *Journal of Criminal Justice* 32:123–35.

Hurst, Yolanda G. 2007. Juvenile attitudes towards the police: An examination of rural youth. *Criminal Justice Review* 32:121–41.

Hurst, Yolanda G., and James Frank. 2000. How kids view cops: The nature of juvenile attitudes toward the police. *Journal of Criminal Justice* 28:189–202.

Hurst, Yolanda G., M. Joan McDermott, and Deborah L. Thomas. 2005. The attitudes of girls toward the police: Differences by race. *Policing: An International Journal of Police Strategies and Management* 28:578–93.

Jones-Brown, Delores. 2007. Forever the symbolic assailant: The more things change, the more they stay the same. *Criminology & Public Policy* 6:103–22.

Kahn, Jeremy. 2007. The story of a snitch. *The Atlantic*. April. http://www.theatlantic.com/doc/200704/stop-snitching.

Kennedy, David M. 2008. *'Stop Snitching' Movement Confounding Criminal Justice.* National Public Radio. http://www.npr.org/templates/story/story.php?storyId=90280108.

Kennedy, Randall. 1997. *Race, Crime, and the Law*. New York: Pantheon Books.

Kidd, Robert, and Ellen Chayet. 1984. Why do victims fail to report? The psychology of criminal victimization. *Journal of Social Issues* 40:39–50.

Klinger, David A. 1997. Negotiating order in police work: An ecological theory of police response to deviance. *Criminology* 35:277–306.

Laub, John H. 1981. Ecological considerations in victim reporting to the police. *Journal of Criminal Justice* 9:419–30.

Leiber, Michael J., Mahesh K. Nalla, and Margaret Farnworth. 1998. Explaining juveniles' attitudes toward the police. *Justice Quarterly* 15:151–74.

Lueptow, Lloyd, Samuel A. Mueller, Richard R. Hammes, and Lawrence S. Master. 1977. The impact of informed consent regulations on response rate and response bias. *Social Methods & Research* 6:183–204.

Markowitz, Fred E., Paul E. Bellair, Allen E. Liska, and Jianhong Liu. 2001. Extending social disorganization theory: Modeling the relationships between cohesion, disorder and fear. *Criminology* 39:293–319.

Melde, Chris, Finn-Aage Esbensen, and Karin Tusinski. 2006. Addressing program fidelity using onsite observations and program provider descriptions of program delivery. *Evaluation Review* 30:714–30.

Menjívar, Cecilia, and Cynthia L. Bejarano. 2004. Latino immigrants' perceptions of crime and police authorities in the United States: A case study from the Phoenix Metropolitan area. *Ethnic and Racial Studies* 27:120–48.

Pattillo, Mary. 1998. Sweet mothers and gangbangers: Managing crime in a black middle-class neighborhood. *Social Forces* 76:747–74.

Portes, Alejandro. 2000. The hidden abode: Sociology as analysis of the unexpected. *American Sociological Review* 65:1–18.

Rabe-Hesketh, Sophia, and Anders Skrondal. 2008. *Multilevel and Longitudinal Modeling Using Stata*, 2nd ed. College Station, TX: StataCorp LP.

Reisig, Michael D., and Roger B. Parks. 2000. Experience, quality of life, and neighborhood context: A hierarchical analysis of satisfaction with the police. *Justice Quarterly* 17:607–30.

Reisig, Michael D., and Roger B. Parks. 2003. Neighborhood context, police behavior, and satisfaction with the police. *Justice Research and Policy* 5:37–66.

Rosenfeld, Richard, Bruce A. Jacobs, and Richard Wright. 2003. Snitching and the code of the street. *British Journal of Criminology* 43:291–309.

Sampson, Robert J., Stephen W. Raudenbush, and Felton Earls. 1997. Neighborhoods and violent crime: A multilevel study of collective efficacy. *Science* 277:918–24.

Schafer, Joseph A., Beth M. Huebner, and Timothy S. Bynum. 2003. Citizen perceptions of police services: Race, neighborhood context, and community policing. *Police Quarterly* 6:440–68.

Schnebly, Stephen M. 2008. The influence of community-oriented policing on crime-reporting behavior. *Justice Quarterly* 25:223–50.

Schneider, Ann L., Janie M. Burcart, and L. A. Wilson III. 1976. The role of attitudes in the decision to report crimes to the police. In *Criminal Justice and the Victim*, ed. William F. McDonald. Beverly Hills, CA: Sage.

Sewell, William H., and Robert M. Hauser. 1975. *Education, Occupation and Earnings: Achievement in the Early Career*. New York: Academic Press.

Shaw, Clifford R., and Henry D. McKay. 1972 [1942]. *Juvenile Delinquency and Urban Areas, Revised Edition*. Chicago, IL: University of Chicago Press.

Skogan, Wesley G. 1976. Citizen reporting of crime: Some national panel data. *Criminology* 13:535–49.

Skogan, Wesley G. 1984. Reporting crimes to the police: The status of world research. *Journal of Research in Crime and Delinquency* 21:113–37.

Smith, Douglas A. 1986. The neighborhood context of police behavior. In *Crime and Justice: A Review of Research,* vol. 8, ed. Michael H. Tonry. Chicago, IL: The University of Chicago Press.

Snyder, Howard N. 2003. *Juvenile Arrests 2001*. Washington, DC: Office of Juvenile Justice and Delinquency Prevention, Juvenile Justice Bulletin.

Solis, Carmen, Edwardo L. Portillos, and Rod K. Brunson. 2009. Latino youth's experiences with and perceptions of involuntary police encounters. *The ANNALS of the American Academy of Political and Social Science* 623:39–51.

Stewart, Eric A., Eric P. Baumer, Rod K. Brunson, and Ronald L. Simons. 2009. Neighborhood racial context and perceptions of police-based racial discrimination among black youth. *Criminology* 47:847–88.

Taylor, Terrance J., K. B. Turner, Finn-Aage Esbensen, and L. Thomas Winfree, Jr. 2001. Coppin' an attitude: Attitudinal differences among juveniles toward police. *Journal of Criminal Justice* 29:295–305.

Tonry, Michael H. 1995. *Malign Neglect: Race, Crime, and Punishment in America*. New York: Oxford University Press.

Triplett, Ruth, Ivan Y. Sun, and Randy R. Gainey. 2005. Social disorganization and the ability and willingness to enact control: A preliminary test. *Western Criminology Review* 6:89–103.

Tyler, Tom R. 2006. *Why People Obey the Law*. New Haven, CT: Yale University Press.

U.S. Census Bureau. 2000. Census 2000. Summary files 1 and 3. http://americanfactfinder.census.gov.

Warner, Barbara D. 2007. Directly intervene or call the authorities? A study of forms of neighborhood social control within a social disorganization framework. *Criminology* 45:99–129.

Watkins, Adam. 2005. Examining the disparity between juvenile and adult victims in notifying the police: A study of mediating variables. *Journal of Research in Crime and Delinquency* 42:333–53.

Websdale, Neil. 2001. *Policing the Poor: From Slave Plantation to Public Housing*. Boston, MA: Northeastern University Press.

Weitzer, Ronald. 1999. Citizens' perceptions of police misconduct: Race and neighborhood context. *Justice Quarterly* 16:819–46.

Weitzer, Ronald, and Steven A. Tuch. 2005. Racially biased policing: Determinants of citizen perceptions. *Social Forces* 83:1009–30.

Wells, William, Joseph A. Schafer, Sean P. Varano, and Timothy Bynum. 2006. Neighborhood residents' production of order: The effects of collective efficacy on responses to neighborhood problems. *Crime and Delinquency* 52:523–50.

Wilkinson, Deanna L. 2007. Local social ties and willingness to intervene: Textured views among violent urban youth of neighborhood social control dynamics and situations. *Justice Quarterly* 24:185–220.

Wright, Richard T., and Scott H. Decker. 1997. *Armed Robbers in Action: Stickups and Street Culture*. Boston, MA: Northeastern University Press.

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Appendix A. Description of Variables

Reporting Intentions (α = .87)

How likely is it that you would report the following events if you saw someone doing the following things?

1. Breaking into a home in your community
2. Beating up a stranger on the street
3. Stealing something from a store

1. Not at all likely 2. A little likely 3. Somewhat likely 4. Likely 5. Very likely

Positive Attitudes Toward the Police (α = .90)

1. Police officers are honest.
2. Police officers are hardworking.
3. Most police officers are usually friendly.
4. Police officers are usually courteous.
5. Police officers are respectful toward people like me.

1. Strongly disagree 2. Disagree 3. Neither agree nor disagree 4. Agree 5. Strongly agree

Likelihood of Being Victimized in Community (α = .87)

Every now and then things happen to us. How likely do you think it is that the following things will happen to you?

1. Having someone break into your house while you are there
2. Having someone break into your house while you are away
3. Having your property damaged by someone
4. Being robbed or mugged
5. Being attacked by someone with a weapon

1. Not at all likely 2. A little likely 3. Somewhat likely 4. Likely 5. Very likely

Perceptions of Community Crime and Disorder (α **= .82)**
Thinking about your neighborhood, please indicate how much of a problem each of the following is in your neighborhood.

1. Run down or poorly kept buildings in the neighborhood
2. Groups of people hanging out in public places causing trouble
3. Gratffiti on buildings and fences in the neighborhood
4. People on the street begging for money or other things
5. Not enough places where young people can go and have fun in the neighborhood
6. Buildings or personal belongings being broken or torn up in the neighborhood
7. Hearing gunshots in the neighborhood

1. Not a problem 2. Somewhat of a problem 3. Big Problem

Role of Youth in the Community (α **= .70)**
Please circle the answer that best describes your opinion of the following statements.

1. There's not much I can do to change our community. (reverse coded)
2. It is my responsibility to do something about problems in our community.
3. My involvement in the community improves others' lives.
4. Teenagers can make a difference in improving their community.
5. Adults in my neighborhood encourage young people to get involved in community activities.
6. Young people take an active role in my neighborhood.

1. Strongly disagree 2. Disagree 3. Neither agree nor disagree 4. Agree 5. Strongly agree

Awareness of Services (α **= .77)**
Sometimes we find that we need help with various problems that are encountered at school or elsewhere. The following questions ask about the kinds of services that you know are available to people when they need help.

1. You are aware of programs and services in your community that help victims of crime
2. You know where a person can go for help if he/she is victimized
3. If a friend was in trouble, you could tell them where to go for help
4. There is someone you could talk to if you had a problem at school

1. Strongly disagree 2. Disagree 3. Neither agree nor disagree 4. Agree 5. Strongly agree

Delinquency (Variety)

Studies have found that everyone breaks the rules and laws sometimes. Please indicate whether you have ever done any of these things.

1. Skipped classes without an excuse
2. Lied about your age to get into some place or to buy something
3. Avoided paying for things such as movies, bus, or subway rides
4. Purposely damaged or destroyed property that did not belong to you
5. Bullied other students at school
6. Carried a hidden weapon for protection
7. Illegally spray painted a wall or a building
8. Stolen or tried to steal something worth less than $50
9. Stolen or tried to steal something worth more than $50
10. Gone into or tried to go into a building to steal something
11. Hit someone with the idea of hurting them
12. Attacked someone with a weapon
13. Used a weapon or force to get money or things from people
14. Been involved in gang fights
15. Sold marijuana or other illegal drugs

0 = No 1 = Yes

Appendix B. Correlations for Individual-Level Variables

Variable	1	2	3	4	5	6	7	8	9	10
1. Reporting intentions	1.00									
2. Stopped or arrested and satisfied	.03	1.00								
3. Stopped or arrested and neither satisfied nor dissatisfied	−.04	−.06*	1.00							
4. Stopped or arrested and dissatisfied	−.15***	−.07*	−.08**	1.00						
5. Positive attitudes toward the police	.31***	.04	−.12***	−.24***	1.00					
6. Delinquency	−.26***	.11***	.15***	.33***	−.40***	1.00				
7. Likelihood of victimization	.10***	−.02	.03	.06*	−.08**	.09***	1.00			
8. Perceptions of community disorder	−.09***	.02	.07**	.10***	−.11***	.22***	.35***	1.00		
9. Role of youth in the community	.30***	−.01	−.07*	−.09**	.40***	−.30***	−.05	−.08**	1.00	
10. Awareness of services	.26***	.04	−.02	−.09**	.41***	−.23***	−.02	−.00	.42***	1.00

* $p < .05$; ** $p < .01$; *** $p < .001$.