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**Silence Speaks:
The Relationship Between Immigration and the Reporting of Crime**

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Abstract

Scarce in criminological literature is an exploration of whether crime reporting varies geographically. Yet, there are substantive reasons to believe not only that the percentage of crimes reported to the police varies across jurisdictions, but also that crime reporting can be explained by ecological characteristics. Drawing upon data from both the National Crime Victimization Survey and the U.S. census, this study examines the relationship between immigration and the likelihood that crimes are reported to the police. Results indicate that crime reporting is inversely related to increases in the relative size of both the noncitizen and foreign-born populations within a metropolitan area, and that the negative effect is greater for violence than for property crime.

Key Words

immigration, crime reporting, contextual effects, victimization, social contexts

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Sir Robert Peel, the late British Prime Minister and founder of the London Metropolitan Police Department, is generally attributed with the creation of the nine principles of policing that still serve as a blueprint for modern police organizations (New York Times, 2014). The first principle states, “The basic mission for which the police exist is to prevent crime and disorder.” If, however, the police are aware of relatively few of the crimes committed, is it possible for the police to fulfill their mission or to evaluate their capacity to do so?

The fact is that the police do not know about most crimes. Based on analysis of National Crime Victimization Survey (NCVS) data, the Bureau of Justice Statistics (BJS) estimates that fewer than 37% of all victimizations are reported to the police (Truman & Langton, 2014). For property crimes, just 36% are reported to the police. The situation with violence is slightly better, yet the police are notified of only 46% of violent crimes (Truman & Langton, 2014). Hence, data compiled by the Federal Bureau of Investigation (FBI) from local law enforcement for the Uniform Crime Reports (UCR) provides only a partial picture of the true volume of crime in society.

The FBI recognizes the fallible nature of crime data, and cautions data users of its “Crime in the United States” information series from ranking cities or counties based upon reported crime statistics. The FBI (2010, p. 2) states, “One city may report more crime than a comparable one, not because there is more crime, but rather because its law enforcement agency, through proactive efforts, identifies more offenses. Attitudes of the citizens toward crime and their crime reporting practices, especially concerning minor offenses, also have an impact on the volume of crimes known to police.”

An extensive amount of scholarly attention has been dedicated to understanding both the incident- and individual-level factors that contribute to one’s likelihood of reporting crime to the

police (Baumer & Lauritsen, 2010; Felson et al., 2002; Gottfredson & Hindelang, 1979; Skogan, 1984), but relatively scarce in the research literature is an exploration of whether there is geographic variation in the reporting of crime (exceptions include: Baumer, 2002; Goudriaan et al., 2006). Yet there are substantive reasons to believe not only that the percentage of crimes reported to the police varies across jurisdictions, but also that crime reporting can be explained by characteristics of urban areas. For instance, in cities with large numbers of immigrants, proportionally fewer crimes may get reported to the police than in cities with smaller immigrant populations if immigrants are reluctant to interact with the police for fear of deportation or harassment.

Prior work on immigrant attitudes toward the law and legal officials highlights several reasons why crimes may be less likely to be reported to the police in immigrant communities. For example, negative experiences with legal authorities in their countries of origin (Pogrebin & Poole, 1990; Tyler, Schulhofer, & Huq, 2010), fear of the police due to their immigration status (Menjívar & Bejarano, 2004), and cultural and language barriers between immigrants and legal officials (Davis, 1985; Pogrebin & Poole, 1990), may all deter immigrants from reporting crime to the police. Many immigrant destinations routinely cited by journalists, politicians, and police chiefs as being the safest in the country—such as San Diego, San Jose, Austin, and New York (CQ Press, 2013)—may be more dangerous than commonly perceived, and the police simply do not know how unsafe because of the underreporting of crime. Though some legal experts suggest that the underreporting of crime is related to immigration (e.g., Pogrebin & Poole, 1990), little empirical work has actually tested this hypothesis. Accordingly, in this study we ask: to what extent does the underreporting of crime to the police vary by characteristics of metropolitan areas

(MSAs), particularly changes in the relative sizes of the noncitizen and foreign-born populations?

We draw upon data on the reporting of crimes from the National Crime Victimization Survey (NCVS) as well as estimates on the sizes of the noncitizen and foreign-born populations from the U.S. census to test the following hypothesis: growth in the relative size of the immigrant population within a metropolitan area is negatively predictive of the proportion of crimes reported to the police.

In our analysis, we focus on the effect of the growth in two related subsets of the immigrant population—i.e., the relative sizes of the *noncitizen* population and *foreign-born* population. Whereas these designations both contain unauthorized as well as authorized immigrant members, the proportions are not equal across designations. Therefore, each designation represents a slightly different group. Given the difficulty and uncertainty of measuring the actual unauthorized population (see Passel and Cohn 2011), we rely on estimates of the noncitizen population as an indicator of unauthorized immigrants. More than half of all noncitizens are unauthorized residents (Passel & Cohn 2009) whose perceptions the police may be tied to their fears of detection and deportation (Menjívar & Bejarano, 2004). Consequently, the underreporting of crime may be especially prevalent among unauthorized residents.

Many factors may influence even *authorized* immigrants to avoid the police, such as their preexisting perceptions of illegitimate or corrupt legal systems in their countries of origin (Pogrebin & Poole, 1990; Tyler, Schulhofer, & Huq, 2010), or their difficulty navigating such contact due to language and cultural barriers (Davis, 1985; Meeker & Dombrink, 1988). We rely on the relative number of foreign-born residents in an MSA to represent the generally authorized immigrant population since the majority (70%) of this group has some legal form of residency

(Passel & Cohn 2009). Understanding the link between changes in both the unauthorized (i.e., noncitizens) and authorized (i.e., foreign-born) immigrant populations and the reporting of crime to the police may thus advance our knowledge on the disparate reasons why crime remains underreported.

Correlates of Police Notification

Researchers have developed a large body of literature concerning the correlates of crime reporting to the police (e.g., Block, 1974; Laub, 1981; Skogan, 1976, 1977, 1984). Scholars widely agree that a crime's level of severity most strongly predicts whether it is reported to the police (Baumer, 2002; Bennett & Weigan, 1994; Felson et al., 2002; Gottfredson & Hindelang, 1979; Skogan, 1976, 1984). More serious crimes that involve the presence or use of a weapon, result in an injury, or bring about significant financial loss, increase the likelihood of police notification (Baumer, 2002; Block, 1974; Gottfredson & Hindelang, 1979; Skogan, 1976, 1984). Accordingly, robberies and aggravated assaults are more likely to be reported to the police than petty thefts or simple assaults (Rand & Catalano, 2007; Truman & Langton, 2014).

An incident's severity (or lack thereof) has also been found to influence the rationale for non-reporting decisions. For instance, analysis of the NCVS reveals that the majority of simple assault victims who chose not to notify the police of their experience disclosed that their decision was based on the fact that they considered their incident a "personal matter," and that their incident was "dealt with in another way." Victims of less severe crimes also commonly reveal that they forewent the reporting process because it was "not important enough" (Langton et al., 2012, p. 2-4). Similar narratives for non-reporting have also been found across international contexts (e.g., Buikhuisen, 1975; Schwind, 1984).

Although much of the decision involved in crime reporting to the police depends on the incident's severity, the likelihood of reporting also rests on offender and victim traits. For example, reporting to the police is more common when the offender was under the influence of alcohol or drugs. Reporting is also more common for crimes involving a Black offender as well as multiple offenders, and reporting is positively correlated with offender age (Fisher et al., 2003; Hart & Rennison, 2003). In terms of victim characteristics, crimes are more likely to be reported to the police when the victim is older, female, Black, and married (Baumer & Lauritsen, 2010; Block, 1974; Hart & Rennison, 2003).

Contextual Determinants of Crime Reporting

In order to understand the relationship between immigration and crime reporting, we turn to other research focused on the contextual correlates of crime reporting. Most work in this area centers on socioeconomic disadvantage as it relates to geographic differences in the proportion of crimes report to the police, yet the findings from existing studies on this relationship are somewhat mixed. Whereas research from the latter part of the 20th century generally finds little evidence of an association between poverty and crime reporting (e.g., Bennett & Wiegand, 1994; Gottfredson & Hindelang, 1979; Warner, 1992), recent work demonstrates a more nuanced understanding. For example, Baumer (2002) finds no significant relationship between an area's socioeconomic standing and the probability that the police are notified of most forms of violence, with the exception of simple assault. For simple assaults, reporting to the police is lowest in wealthy *as well as* severely disadvantaged neighborhoods, with higher levels of reporting for neighborhoods falling in the middle range on a socioeconomic scale. Baumer (2002) suggests the patterns of lower reporting in wealthy and poor areas relative to middle-

income neighborhoods may reflect higher levels of informal social control in very advantaged and very disadvantaged communities.

Other contextual work examines the variation in reporting across time and space. Generally, the proportion of crimes reported to the police has generally increased over time. In their comprehensive investigation of NCVS data from 1973 to 2005, Baumer and Lauritsen (2010) find that rates of notification to the police for burglary, motor vehicle theft, larceny, and other forms of violence—except for robbery—have increased since the mid-to-late 1980s.

Patterns of crime reporting also vary across metropolitan areas. Xie (2014) finds significant differences in crime reporting from 1979 to 2004 across U.S. metropolitan areas. Over this time, New Yorkers were significantly less likely than their counterparts living in the other largest MSAs (Los Angeles, Chicago, Philadelphia, and Detroit) to notify the police of crimes occurring in their city. Xie (2014) also observes that Los Angeles closely resembles New York in terms of crime reporting rates, suggesting “research needs to go beyond crime characteristics to explain the low rates of reporting in New York and Los Angeles” (Xie, 2014, p. 8). One potential reason for these MSA differences in reporting—although untested to date—is immigration. Immigrants represent a much larger share of the total population in New York and Los Angeles than in Chicago, Detroit, or Philadelphia (see Table 2 to follow). Hence, one factor explaining the MSA-level differences found in Xie’s study could be the extent of immigration found in local areas.

Recent survey findings speak to the importance of investigating the relationship between crime reporting and immigration. In their survey of local district attorneys and police chiefs in the 50 largest MSAs, Davis and colleagues (2001) find that 67% of legal officials believe that immigrants report crime less often than non-immigrants. Officials cited their own personal

experiences as well as information from community leaders, the media, and police data, as sources that influenced their beliefs about immigrant crime reporting (Davis, Erez, & Avitabile, 2001). While legal officials assume a relationship between immigration status and the reporting of crime and victimizations to the police, research is generally lacking on this question.

Current Study

Whereas some prior research has investigated the ecological correlates of crime reporting, important challenges remain. Most work in this area focuses on the influence of structural disadvantage or mere spatial variation, yet other factors—such as immigration—may also influence the reporting of crime. We address these limitations by conducting one of the first analyses on the relationship between the relative size of the immigrant population (i.e., noncitizen and foreign-born groups) and crime reporting. Matching crime reporting data from the NCVS to MSA-level demographic information, we test whether changes in the relative size of the immigrant population is significantly related to the likelihood that crimes are reported to the police. We examine this relationship for both property¹ and violent² crime.

Research Design

Data

We use data from the NCVS to examine MSA-level differences in police notification of victimizations. The NCVS is a nationally representative survey of approximately 160,000 individuals in about 90,000 households. The survey aims to interview all members within a household who are at least 12 years old. About 90% of households and 88% of all eligible individuals within households have participated in the survey (Planty, 2014). The NCVS was designed to uncover comprehensive information about individual and household probabilities of victimization, the effect of the relationship between victims and offenders, and the likelihood of

crime reporting. Because most crimes remain unknown to the police, the NCVS is considered the most accurate source of information on the true volume and characteristics of crime and victimization in the United States. We draw upon a special subset of the NCVS data produced by BJS in conjunction with the Census Bureau, the 1979 to 2004 MSA data files. This dataset, which is archived at the Interuniversity Consortium for Political and Social Research (U.S. Department of Justice, 2007), allows for a multilevel investigation of the victimization incidents occurring within the 40 largest MSAs in the country³ (see Table 2 for a complete list of the MSAs).

In the interest of providing the most current analysis possible of crime reporting trends by MSA, we draw upon the most recent years of data available from the NCVS MSA dataset. Following prior research using the same dataset (e.g., Xie, 2014), we pool three years of data in order to smooth year-to-year fluctuations in crime. We also draw upon Census Bureau data for the purpose of measuring immigrant populations and other contextual characteristics. Using the MSA geographic codes, we merge the 2002-2004 NCVS with demographic information from the 1990 and 2000 decennial censuses.

Measures

The dependent variable for our analysis is a binary measure indicating whether the police were notified of a victimization that occurred. Among respondents who disclosed that they have been victimized during a crime, a follow-up question asks, “were the police informed or did they find out about this incident in any way?” We use this question to determine whether (1) or not (0) the police were notified of a crime—regardless of whether the incident was reported by the victim, a third party, or if the police found out in some other way.

As noted previously, we use measures of the percentages of noncitizens and foreign-born residents in an MSA as the main independent variables in our analyses. We specifically use the 1990 rates, as well as estimates of the raw change in the population rates from 1990 to 2000. We focus on the changes in the rates of the noncitizens and foreign-born residents because we anticipate that areas that experienced a substantial influx of immigrant groups may lack the infrastructure and resources to facilitate the integration of immigrants, leaving them isolated from institutions such as the police.

Consistent with previous studies of macro-level predictors associated with crime reporting (e.g., Baumer, 2002; Goudriaan et al., 2006), we also include socio-demographic measures collected from the U.S. census to control for confounding characteristics at the MSA-level. Our control variables include an estimate of the share of residents who are Black and an index of socioeconomic disadvantage computed via principal components analysis (see Sampson, Raudenbush, & Earls, 1997). This index is derived from the following MSA-level census indicators: the unemployment rate of the adult civilian population, median family income, the proportion of families below poverty, the proportion of households with children headed by single mothers, and the proportion of households that receive public assisted income.

In order to separate the effects of individual and contextual features associated with the likelihood of crime reporting, as well as to control for key confounding variables that may bias results if otherwise left unaccounted, we include several individual characteristics in our models. We measure NCVS respondents' sex, race and ethnicity, marital status, education, and homeownership. Females, non-Latino Whites, and non-married individuals serve as the reference categories for victims' sex, race and ethnicity, and marital status, respectively. We account for age using the available NCVS measure. The NCVS provides age as an interval variable coded

into eight categories. Categories one through seven include five-year age groups for persons between 12 and 59 years old, while the eighth category includes respondents who are age 60 and older. Lastly, we include variables for education and housing tenure as indicators of socioeconomic status. Homeownership captures whether the victim (or the victim's family) reported living in an owned home (1), or whether the victim reported living in a rented or otherwise subsidized home (0). Three binary variables measure levels of completed schooling (i.e., *less than high school or GED equivalency*, *high school graduate*, and *college or more*), with less than a high school degree serving as the reference group.

In addition to accounting for victim traits that influence crime reporting, we also control for incident characteristics that have been shown to influence the likelihood of police notification (e.g., Baumer, 2002; Felson et al., 2002; Gottfredson & Hindelang, 1979; Skogan, 1976, 1984). We measure the severity of property crimes by estimating the natural logarithm of the reported dollar amount lost or stolen as a result of victimization (*financial loss*). The severity of violent crime is approximated with three binary variables used to distinguish incidents during which the offender presented or used a firearm (*offender had gun*), the offender presented or used some weapon other than a firearm (*offender had other weapon*), and the respondent experienced an injury requiring hospitalization as a result of her or his victimization (*serious injury*). Those incidents during which the respondent denied or was uncertain of whether or not the offender had a firearm or some other weapon, and those that resulted in minor or no injuries to the victim, serve as the respective reference categories.

Analytical Strategy

We employ multilevel logistic regression to estimate the association between changes in the relative sizes of the noncitizen and foreign-born populations in an MSA on the individual-

level indicator of whether victimizations were reported to the police. We estimate separate logistic models for the reporting of property and violent offenses. Given the multistage, stratified cluster sample design of the NCVS data, we apply the provided incident weights to reduce sampling bias.

We also account for potential issues of model misspecification. Data derived from the NCVS MSA file contain multiple observations within each metro area, requiring us to account for the clustered sampling design. Although observations may be independent across MSA clusters, the data within MSA clusters are not necessarily independent. Consequently, we specify that our logistic models permit intragroup correlation, which avoids inflated standard errors and produces unbiased coefficients (see Neuhaus & Kalbfleisch, 1998).

Findings

We begin by presenting descriptive statistics for our dependent and independent variables in Table 1. Victims of violent crimes were more likely to report their incidents to the police than those who experienced property crimes (48% vs. 39%, respectively). In terms of incident characteristics, nearly one-quarter of all violent crimes involved the use or presence of either a firearm (9%) or some other weapon (14%) by the offender, but far fewer incidents (6%) involved a serious injury to the victim. Respondents reported an average loss of about \$320.53 as a result of their property crime victimizations.

Table 1 also includes the macro-level factors we use to account for the contextual differences across the 40 MSAs. The primary focus of our analysis is on changes in the relative sizes of the noncitizen and foreign-born populations. In 1990, the average size of the noncitizen and foreign-born populations within the 40 MSAs were about 7% and 11%, respectively. By

2000, these populations each grew about 40 and 45% in size—making up approximately 9% and 16% of the total population living across the 40 MSAs.

Though the descriptive data in Table 1 indicates that the number of immigrants increased at the aggregate level, we expect variation in the relative changes of the immigrant populations across the 40 MSAs. We also anticipate that the level of crimes reported to the police will vary across the 40 MSAs in congruence with changes in an area's concentration of immigrant residents. While experts suggest that immigration relates to the likelihood of crime reporting (e.g., Pogrebin & Poole, 1990), and prior work on crime reporting across MSAs shows significant variation in reporting across cities (e.g., Xie, 2014), we know little about the contextual characteristics related to police notification. We turn to Table 2 to investigate levels of variation in crime reporting as well as the differences in the sizes of the noncitizen and foreign-born populations across the 40 MSAs.

[Table 1 about here]

Table 2 displays the reporting rates for both property and violent crimes for all 40 MSAs. Descriptively, the data in Table 2 reveal substantial variation across metropolitan areas in the likelihood that victimization is reported to the police. On average, 39% of property crimes across the 40 MSAs were reported to the police. In comparison, some areas reported as high as 52% of property crimes (e.g., West Palm Beach-Boca Raton), while other cities reported as low as 31% (e.g., San Diego). Variation in levels of violent crime reporting was even greater across the 40 MSAs. For example, while nearly three-quarters (72%) of violent victimizations were reported to the police in Cleveland, only 21% of violence was reported in Orlando. It is this substantial variation in reporting rates, particularly for violent crime, that we seek to explain in this study.

Also reported in Table 2 are the percentages of noncitizen and foreign-born residents in both 1990 and 2000 for the 40 MSAs. Areas with the highest rates of noncitizen and foreign-born residents include Miami, Los Angeles-Long Beach, and Anaheim-Santa Ana. Midwestern MSAs such as St. Louis, Pittsburgh, and Kansas City have the lowest shares of their populations made up by noncitizen and foreign-born residents.

All 40 MSAs experienced growth in either their noncitizen or foreign-born population rates from 1990 to 2000, and most cities saw increases in both groups. Though we hypothesize that immigration significantly relates to levels of crime reporting, the correlations between the rate of property crime reporting and changes in the percentages of the noncitizen and foreign-born populations are modest (-0.05 and -0.12, respectively). The correlations between these population changes and rates of violent crime reporting, however, are greater (-.024 and -0.21, respectively). Our ensuing analyses will further investigate whether metropolitan characteristics, especially changes in the rates of the population noncitizen and foreign-born, are significantly associated with the likelihood that crimes are reported to the police.

[Table 2 about here]

We present the results of our logistic regression analyses for the likelihood of property crime reporting in Table 3. The first model in Table 3 focuses on the relationship between property crime reporting and changes in the number of noncitizen residents, while the second model estimates this association with changes in the relative size of the foreign-born population.

[Table 3 about here]

Consistent with previous research (e.g., Baumer, 2002; Baumer & Lauritsen, 2010; Block, 1974), both models in Table 3 demonstrate that the police are more likely to be notified of

property crime when the victim is Black, older, and married. The victim's level of education and financial loss also positively correlate with property crime reporting.

Most importantly, results in Table 3 address our main research question of interest: do changes in the relative sizes of the noncitizen and foreign-born populations affect the likelihood of police notification? We find that neither changes (1990 to 2000) in the relative size of the noncitizen nor the foreign-born population significantly predict property crime reporting. However, the baseline (1990) rates of each group have a marginally significant association with the likelihood that the police are notified of property crime. A one percent increase in the rates of the noncitizen and foreign-born populations corresponds to a 1% decrease in the odds of property crimes being reported to the police, on average. Our results support the work of Davis and colleagues (2001), who found that immigration has little bearing on the reporting of property crimes, according to the views of legal officials. However, the authors also found that legal officials view immigration as far more impactful on the reporting of violence to the police. We turn to our analyses in Table 4 to address this assertion.

[Table 4 about here]

Table 4 reveals that both victim and incident characteristics operate in the expected direction and extent as predictors of the reporting of violence to the police (see Baumer, 2002; Baumer & Lauritsen, 2010; Hart & Rennison 2003; Laub, 1981). In addition to uncovering these anticipated findings, Table 4 tests our central research question: is violent crime reporting to the police negatively influenced by changes in the relative sizes of the noncitizen and foreign-born populations? We find that the change in the proportion of noncitizen residents from 1990 to 2000 significantly influences violent crime reporting. A one percent increase in the noncitizen population decreases the odds of violent crime reporting by about 6%, on average. Metropolitan

areas that experienced rapid influx by immigrants during the 1990s therefore appear to suffer substantial levels of underreporting of violent crime to the police relative to cities that did not experience such growth in the share of their noncitizen populations.

To further elucidate the relationship between immigration and crime reporting within a metropolitan area, we estimate the probabilities of police notification at varying levels of change in the rates of both the noncitizen and foreign-born populations while holding all control variables at their means (using model estimates from Tables 3 and 4, respectively). Figure 1 displays the estimated probabilities of police notification for property crime victimizations and Figure 2 displays such estimates for violent victimizations. Levels of property crime reporting remain relatively stable across varying levels of change in both immigrant group populations. By contrast, Figure 2 reveals that increases in the relative size of the immigrant population exhibit sizeable effects on violent crime reporting. Rates of violent crime reporting fall over 19% as one moves from areas that experienced little or no changes in the rate of their noncitizen residents to other areas that underwent substantial growth in their relative sizes of the noncitizen population. Places like Phoenix, Dallas, and Atlanta, for example, that experienced the largest growth in the proportion of their residents made up by noncitizens from 1990 to 2000 (see Table 2), may therefore endure the greatest barriers to reporting crime when it comes to violence.

[Figures 1 and 2 about here]

Increases in the share of foreign-born residents exert similar effects on violent crime reporting. Among cities where the level of foreign-born residents remained stable over time, the probability that the police are notified of violent crime is over 50%. In areas that experienced the most substantial increases in the rates of their foreign-born populations (e.g., San Jose, Fort Lauderdale, and Atlanta), however, the probability of violent crime reporting falls nearly 15

percent. Such results may occur because areas that underwent rapid increases in immigration may lack the services, cultural sensitivity, and overall infrastructure, to accommodate the relationships between legal authorities and immigrant groups (i.e., noncitizen and foreign-born residents), which may otherwise promote police notification.

Discussion and Conclusion

Despite a great deal of theoretical and empirical attention dedicated to uncovering why most crimes remain unreported to the police, a consideration of the social contexts surrounding the reporting of crime has been comparatively neglected in the research literature. However, there is reason to believe that the level of immigration within a geographic area influences the extent to which crimes are reported to the police. Both qualitative and quantitative studies show that negative experiences with the law and legal authorities in their countries of origin partially influence immigrants' perceptions of the American criminal justice system (e.g., Kirk et al., 2012; Menjívar & Bejarano, 2004; Tyler, Schulhofer, & Huq, 2010). Immigrants who experience harsh or oppressive legal systems may transfer their sentiments to officials in the U.S., regardless of whether they have any direct interaction with such authorities. Immigrants may also rationally decide not to report crime to the police because of their citizenship status, considering the extent to which criminal and immigration policies have converged in recent years (see Coutin, 2011). For example, restrictive immigration policies have reemerged in recent decades, and especially in the wake of the 9/11 terrorist attacks, creating potential mistrust of legal authorities who have the power to exercise immigration enforcement sanctions, such a deportation. Moreover, immigration may relate to the underreporting of crime to the extent that cities with substantial growth in the relative size of their immigrant populations may lack adequate infrastructures to accommodate and support immigrants' unique needs.

While the total U.S. population grew about 13% between 1990 and 2000, the numbers of noncitizen and foreign-born residents each increased by nearly 60% during this period. Hence, the relative growth of immigrant populations outpaced increases in the overall population four times over. Some scholars have speculated that increases in immigration should influence underreporting (e.g., Davis, Erez, & Avitabile, 2001; Pogrebin & Poole, 1990), but empirical testing of this hypothesis has been very limited.

We investigated the relationship between changes in the relative sizes of the noncitizen and foreign-born populations and the likelihood of crime reporting by combining data from the 2002-2004 NCVS MSA file with socio-demographic estimates from the 1990 and 2000 decennial censuses. Our results substantiate the importance of immigrant concentration for understanding the likelihood that crimes are reported to the police. We find that increases in rates of both the noncitizen and foreign-born populations are negatively related to the likelihood that the police are notified of crime within a metropolitan area. Growth in the relative size of the immigrant population exerts the strongest influence on the underreporting for violent crimes compared to property crimes.

Our findings are not without limitations, however. Our data lack individual-level information on the nativity and citizenship status of NCVS respondents. Therefore, while we uncover a negative relationship between police notification rates and increases in immigration at aggregate levels, we do not know if it is immigrant residents themselves who are opting not to report victimizations. Rather, it could be that native-born citizens are likely to underreport victimizations in areas inhabited by many immigrants. Accordingly, future research must dedicate attention to the individual-level question of whether and why immigrants may be less likely than other groups to report victimizations to the police.

Other details from our findings highlight further needs for future research. For example, our results show that the relationship between immigration and crime reporting diverges by victimization type (i.e., property crime vs. violence). The reasons for this divergence deserve more research attention. Excerpts from qualitative interviews with legal officials suggest that immigrants face unique fears surrounding violence. For example, one police officer stated, “In some cultures, it brings greater shame on the family to report a crime such as rape or robbery to the police” (Davis, Erez, & Avitabile, 2001, p. 190). Other work finds that some cultural groups rely on interpersonal violence as an extra-legal method to resolve conflicts, rather than reporting incidents to the police (Pogrebin & Poole, 1990). The inadequacy or corruption of criminal justice systems in their origin countries may also influence whether immigrants living in the U.S. will report victimizations to the police (e.g., Davis, Erez, & Avitabile, 1998; Pogrebin & Poole, 1990; Tyler, Schulhofer, & Huq, 2010). Given that our data lack information on the reasons why crimes remained unknown to the police, however, our explanation of the differences between underreporting of property and violent crimes as it relates to contextual measures of immigrant populations remains suggestive.

Despite facing research design challenges and limitations, we nonetheless provide insight to our central research question: to what extent does the underreporting of crime to the police vary by characteristics of metropolitan areas, particularly changes in the relative sizes of the noncitizen and foreign-born populations? We uncovered a significant negative relationship between increases in the relative size of the immigrant population and the likelihood that police are notified of violent crimes. In addition to filling a gap in the literature on the association between immigration and crime reporting, our results have important practical and policy implications. Investigating what predicts the underreporting of crime within local areas

represents a critical area of research because the failure to report crime has enduring consequences for public safety. The police and courts remain unaware of and ostensibly powerless against most incidents that occur in their jurisdictions as a result of low crime reporting. Residents in areas that experience low levels of crime reporting may not only suffer grave safety consequences for uncontrolled crime, but may also endure significant injustices as a result of unsupported victimizations and unpunished offenders who evade charges for their crimes. Or, as one police officer from a California MSA puts it, “Crime multiples significantly if unreported and endangers everyone. Unresolved resentments grow in the community and can escalate” (Davis, Erez, & Avitabile, 2001, p. 188).

Declaration of Conflicting Interests

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Notes

1. This measure includes the following types of victimizations: burglary, motor vehicle theft, and theft.
2. This measure includes the following types of victimizations: rape, sexual assault, robbery, aggravated assault, and simple assault.
3. As determined from the 1970 decennial census: <http://doi.org/10.3886/ICPSR04576.v1>

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Table 1. Means and Standard Deviations of Dependent and Independent Variables, NCVS MSA 2002-04 and U.S. Censuses 1990, 2000.

	Property Crime (<i>N</i> = 10,021)		Violent Crime (<i>N</i> = 2,293)	
	Mean	SD	Mean	SD
Individual level (<i>N</i> = 12,314)				
<i>Dependent Variable</i>				
Crime reported to the police	.39	.49	.48	.50
<i>Victim Characteristics</i>				
Male	.45	.50	.56	.50
Latino	.18	.38	.17	.37
Non-Latino Black	.15	.36	.17	.38
Non-Latino Other	.05	.21	.05	.22
Age	4.69	2.18	3.73	2.22
Less than high school	.20	.40	.22	.41
High school	.24	.42	.32	.47
College or more	.54	.50	.45	.50
Married	.42	.49	.24	.43
Homeowner	.61	.49	.52	.50
<i>Incident Characteristics</i>				
Offender had gun			.09	.28
Offender had other weapon			.14	.35
Serious injury			.06	.24
Financial loss	\$320.53	\$15.49		
MSA level (<i>N</i> = 40)				
<i>Contextual Characteristics</i>				
% of the population noncitizen (1990)	6.77	6.32		
% of the population noncitizen (2000)	9.45	6.08		
% change in the population noncitizen	2.68	1.99		
% of the population foreign-born (1990)	11.30	9.42		
% of the population foreign-born (2000)	16.04	10.69		
% change in the population foreign-born	4.74	2.49		
% of the population Non-Latino Black	45.58	50.65		
Disadvantage index	.00	1.00		

Note: NCVS MSA 2002-04 = subset of the National Crime Victimization Survey's 1979-2004 Metropolitan Statistical Area data files.

Table 2. Crime Reporting Rates and the Percentage of the Noncitizen and Foreign-born Populations by MSA, NCVS MSA 2002-04 and U.S. Censuses 1990, 2000.

Metropolitan Area	Crime Reporting Rates		Percent of MSA Population			
	Property	Violent	Noncitizens		Foreign-born	
			1990	2000	1990	2000
Anaheim-Santa Ana, CA	41%	57%	17%	19%	24%	30%
Atlanta, GA	41%	48%	3%	9%	5%	13%
Baltimore, MD	44%	53%	2%	3%	4%	6%
Boston, MA-NH	33%	47%	6%	9%	11%	15%
Charlotte-Gastonia-Rock Hill, NC-SC	48%	33%	2%	7%	3%	9%
Chicago, IL	42%	50%	7%	11%	12%	18%
Cincinnati, OH-KY-IN	41%	44%	1%	2%	2%	3%
Cleveland, Lorain, Elyria, OH	41%	72%	2%	2%	5%	6%
Columbus, OH	49%	48%	2%	4%	3%	6%
Dallas, TX	39%	37%	6%	13%	9%	17%
Denver, CO	40%	29%	3%	8%	5%	11%
Detroit, MI	39%	49%	3%	4%	6%	8%
Fort Lauderdale, FL	45%	53%	9%	14%	16%	25%
Fort Worth-Arlington, TX	43%	58%	4%	8%	6%	12%
Houston, TX	43%	49%	9%	14%	13%	20%
Kansas City, MO-KS	50%	55%	1%	3%	2%	5%
Los Angeles-Long Beach, CA	37%	39%	24%	22%	33%	36%
Miami, FL	48%	56%	29%	27%	45%	51%
Minneapolis-St. Paul, MN-WI	42%	49%	2%	5%	4%	8%
Nassau-Suffolk, NY	30%	65%	5%	7%	10%	14%
New York, NY	36%	33%	16%	19%	27%	34%
Newark, NJ	35%	65%	8%	11%	15%	21%
Norfolk-Virginia Beach-Newport News, VA-NC	31%	38%	2%	2%	4%	5%
Oakland, CA	40%	50%	10%	13%	16%	24%
Orlando, FL	45%	21%	4%	7%	7%	13%
Philadelphia, PA-NJ	37%	54%	2%	3%	5%	7%
Phoenix-Mesa, AZ	35%	32%	4%	11%	7%	14%
Pittsburgh, PA	48%	55%	1%	1%	3%	3%
Portland-Vancouver, OR-WA	36%	47%	3%	7%	6%	11%
Riverside-San Bernardino, CA	37%	57%	10%	12%	14%	19%
Sacramento, CA	34%	46%	6%	9%	10%	15%
San Antonio, TX	36%	39%	5%	6%	8%	11%
San Diego, CA	31%	45%	11%	13%	17%	22%
San Francisco, CA	40%	40%	16%	15%	28%	32%
San Jose, CA	29%	51%	15%	20%	23%	34%
Seattle-Bellevue-Everett, WA	43%	45%	4%	8%	8%	14%
St. Louis, MO-IL	42%	51%	1%	2%	2%	3%
Tampa-St. Petersburg-Clearwater, FL	40%	45%	4%	6%	7%	11%
Washington, DC-MD-VA-WV	35%	37%	9%	12%	13%	20%
West Palm Beach-Boca Raton, FL	52%	58%	6%	10%	12%	17%

Note: NCVS MSA 2002-04 = subset of the National Crime Victimization Survey's 1979-2004 Metropolitan Statistical Area data files.

Table 3. Results of Logistic Regression Models for Property Crime Reporting, NCVS MSA 2002-04 and U.S. Censuses 1990, 2000.

	Noncitizens			Foreign-born		
	Coeff.	SE	OR	Coeff.	SE	OR
Intercept	-2.411	.127 ***	.090	-2.390	.124 ***	.092
Individual level (N= 12,427)						
<i>Victim Characteristics</i>						
Male	-.023	.054	.978	-.022	.054	.978
Latino	.073	.101	1.076	.075	.101	1.078
Non-Latino Black	.151	.084 †	1.163	.151	.084 *	1.163
Non-Latino Other	-.168	.142	.845	-.162	.143 †	.850
Age	.040	.013 **	1.041	.040	.013 **	1.041
High school	.546	.094 ***	1.726	.545	.094 ***	1.724
College or more	.501	.081 ***	1.651	.503	.080 ***	1.653
Married	.136	.060 *	1.146	.136	.060 *	1.146
Homeowner	-.098	.049 *	.907	-.100	.050 *	.905
<i>Incident Characteristics</i>						
Offender had gun						
Offender had other weapon						
Serious injury						
Financial loss (natural logarithm)	.245	.009 ***	1.278	.245	.009 ***	1.278
MSA level (N = 40)						
<i>Contextual Characteristics</i>						
% of the population noncitizen (1990)	-.011	.006 †	.989			
Change in the % population noncitizen	-.008	.014	.992			
% of the population foreign-born (1990)				-.007	.004 †	.993
Change in the % population foreign-born				-.009	.013	.991
% of the population Non-Latino Black	.000	.004	1.000	.000	.004	1.000
Disadvantage index	-.028	.039	.973	-.028	.010	.972
Sample Size	8,171			8,171		
Pseudo R ²	.086			.086		
Chi-square	1,621 ***			1,661 ***		

Note: NCVS MSA 2002-04 = subset of the National Crime Victimization Survey's 1979-2004 Metropolitan Statistical Area data files.

SE = robust standard errors.

OR = odds ratios.

† $p < .10$ * $p < .05$ ** $p < .01$ *** $p < .001$ (two-tailed tests).

Table 4. Results of Logistic Regression Models for Violent Crime Reporting, 40 MSAs (2002-2004), NCVS MSA 2002-04 and U.S. Censuses 1990, 2000.

	Noncitizens			Foreign-born		
	Coeff.	SE	OR	Coeff.	SE	OR
Intercept	-.529	.222 *	.589	-.595	.235 *	.551
Individual level (N= 12,427)						
<i>Victim Characteristics</i>						
Male	-.395	.135 **	.673	-.393	.135 **	.675
Latino	.440	.195 *	1.552	.417	.193 *	1.518
Non-Latino Black	.399	.152 **	1.491	.394	.151 **	1.483
Non-Latino Other	.244	.190	1.277	.234	.190	1.264
Age	.120	.029 ***	1.127	.120	.029 ***	1.127
High school	.115	.141	1.122	.117	.142	1.124
College or more	.167	.114	1.182	.169	.113	1.184
Married	.146	.165	1.157	.147	.166	1.158
Homeowner	-.064	.136	.938	-.066	.136	.936
<i>Incident Characteristics</i>						
Offender had gun	1.132	.178 ***	3.732	1.313	.181 ***	3.716
Offender had other weapon	.455	.173 **	1.577	.456	.173 **	1.578
Serious injury	2.024	.326 ***	7.569	2.028	.325 ***	7.598
Financial loss (natural logarithm)						
MSA level (N = 40)						
<i>Contextual Characteristics</i>						
% of the population noncitizen (1990)	-.030	.011 **	.971			
Change in the % population noncitizen	-.066	.029 *	.936			
% of the population foreign-born (1990)				-.009	.008	.991
Change in the % population foreign-born				-.050	.030 †	.952
% of the population Non-Latino Black	.003	.008	1.003	.004	.008	1.004
Disadvantage index	-.040	.074	.961	-.055	.076	.947
Sample Size	2,251			2,251		
Pseudo R ²	.088			.087		
Chi-square	339 ***			341 ***		

Note: NCVS MSA 2002-04 = subset of the National Crime Victimization Survey's 1979-2004 Metropolitan Statistical Area data files.

SE = robust standard errors.

OR = odds ratios.

† $p < .10$ * $p < .05$ ** $p < .01$ *** $p < .001$ (two-tailed tests).

Figure 1. Estimated Probabilities of Police Notification of Property Crime by the Change in the % Noncitizen and Foreign-born Populations

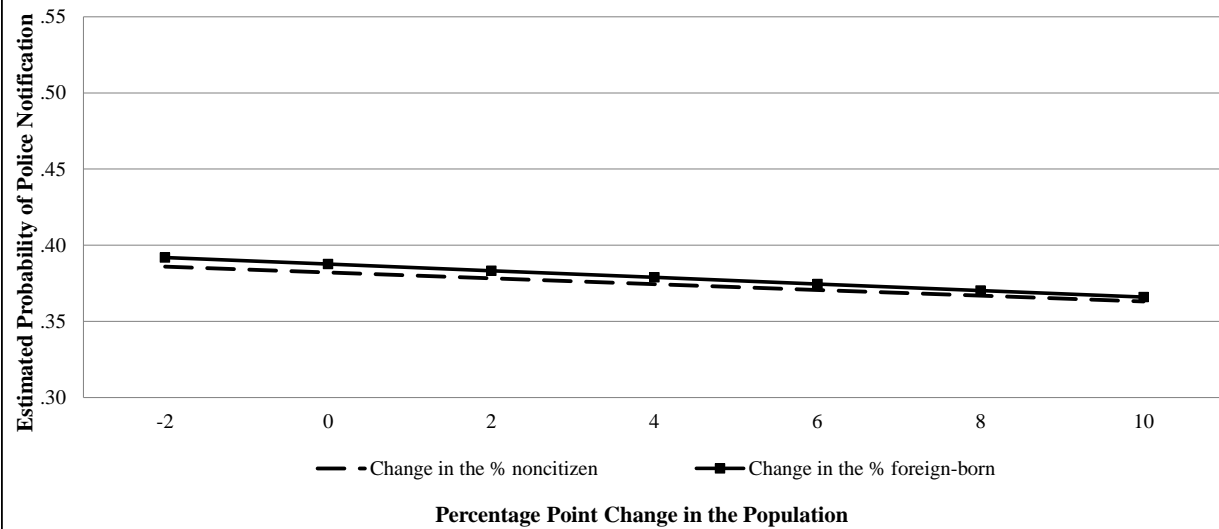


Figure 2. Estimated Probabilities of Police Notification of Property Crime by the Change in the % Noncitizen and Foreign-born Populations

