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Stereotypes, Crime, and Policing

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Abstract

Crime and policing activities routinely involve interactions between strangers and require the interacting parties to make highly consequential decisions under time pressure. Under such conditions, stereotypes based on visual or other cues can influence behavior. This review considers the role of stereotypes in shaping the manner in which such interactions proceed and the likelihood with which they occur in the first place. Our focus is primarily on robbery, murder, police stops and searches, and the use of deadly force, but the arguments apply more generally. We also consider how stereotypes can become entrenched through the behavioral changes they induce, given large differences across offenses in rate of arrest and prison admission.

1. INTRODUCTION

Crime and policing activities frequently involve interactions among strangers. In many instances, decisions with significant welfare consequences must be made under time pressure and based on very limited information. The beliefs that guide these decisions can be influenced by markers of race, ethnicity, or gender as well as other characteristics such as accents, tattoos, and piercings. That is, crime and policing are often influenced by stereotypes.

A stereotype is a belief about an unobserved characteristic of an individual based on their perceived membership in a group. Such beliefs arise from cognitive processes involving categorization and generalization, without which "we would soon be swamped by the complexity of our environment" (Bruner 1957, p. 43). The act of stereotyping is therefore psychologically inescapable. But this does not mean that stereotypes are statistically accurate, stable over time, or uniform across individuals. As Walter Lippmann (1922, pp. 119–20) recognized more than a century ago, "When a system of stereotypes is well fixed, our attention is called to those facts which support it, and diverted from those which contradict." As a result, an inaccurate belief or prejudice can become entrenched by making its holder "actively resistant to all evidence that would unseat it" (Allport 1954, p. 9).

Following influential work by Phelps (1972) and Arrow (1973), economists have tended to assume that stereotypes are statistically accurate while recognizing that they have incentive effects and can thus lead otherwise identical groups to behave in sharply different ways. That is, differences in beliefs about groups can be self-fulfilling, resulting in differences in behavior through the operation of incentives. For instance, members of a group thought to be largely unqualified for skilled positions face significant labor market obstacles, which dulls the incentives to acquire skills in the first place, fulfilling the stereotype (Coate & Loury 1993). Economists call this statistical discrimination and contrast it with preference-based discrimination, where the latter involves malice toward a group (Becker 1957). Legal scholars have tended to use strategic and prejudiced discrimination, respectively, for these two distinct phenomena (Kennedy 1998).[1]

This review examines the role of stereotypes in interactions having to do with crime and policing. We argue this helps us to better understand certain patterns in the data and to provide a more informed approach for policy.

In the case of crime, stereotypes can affect the behavior of victims and offenders whenever interpersonal contact is involved. Stereotypes can also affect the likelihood that an interaction will occur in the first place, for instance, by influencing the process of victim selection. One consequence of this is that crimes that have similar motives—such as burglary and robbery—have very different offender and victim populations. In the case of burglary, there is seldom any face-to-face interaction between victim and offender and hence little scope for stereotypes to affect behavior while the crime is in progress. Robbery is different, in that interpersonal interaction is an essential component of the activity. Stereotypes can affect the likelihood of victim resistance and hence the demographics of victim and offender populations. Such issues are discussed in Section 2.1.

Stereotypes can also affect beliefs about the likelihood that one can be victimized with impunity. One significant statistical regularity in the data on murder clearance rates is that killings with Black victims are less likely to be solved than those with victims drawn from other groups. The fear that one can be killed with impunity creates incentives for preemptive action, and these incentives are amplified if both parties to a dispute have this fear. Low murder clearance rates also cause people

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[1]Sociologists have also considered the incentive effects of (possibly inaccurate) beliefs. The Thomas theorem, for instance, asserts that "if men describe situations as real, they are real in their consequences" (Merton 1948, Merton 1995, Thomas & Thomas 1928).

to take the law into their own hands to avenge the killings of others. Cycles of preemption and retaliation can result in persistently high murder rates in environments where clearance by law enforcement is rare. These effects are discussed in Section 2.2.

We next consider why clearance rates are so low in certain communities and argue that this is in large measure because of limited witness cooperation. Witnesses serve an important social function, usually without material compensation. For such cooperation to be forthcoming, a witness must feel that coming forward is safe, that police and prosecutors can be trusted, and that testimony will be corroborated. Racial profiling in stops and searches—even if it is based on stereotypes that are statistically accurate—can ensnare large numbers of innocent people and erode police–community relations in precisely those communities where witness cooperation is most needed (Tyler et al. 2014). The pursuit of certain legitimate but narrow goals such as contraband recovery can therefore make the attainment of broader goals such as crime reduction more difficult. These issues are addressed in Section 3.1.

Section 3.2 considers police use of lethal force. Since the landmark ruling in *Tennessee v. Garner* (1985), the use of deadly force by police officers is justified under federal law only if the officer reasonably believes that a suspect poses a risk of death or serious bodily harm to the officer or others. Such fears are conditioned by stereotypes, and in the case of intergroup interactions, stereotypes may be far from statistically accurate. There are indeed some shootings in which unwarranted fear on the part of officers appears to have been implicated. However, there are also large geographic variations in the use of lethal force that cannot be accounted for by stereotypes, and these variations appear to suggest an important role for selection, training, leadership, and organizational culture in law enforcement agencies.

Stereotypes do not exist in a vacuum—they are shaped by visual and other stimuli that are circulated, broadcast, and posted online. This raises the possibility of stereotype traps: People who are feared act in ways that lead to arrest and prison admission at elevated rates, and the high visibility of this process entrenches the stereotypes that cause them to be feared in the first place. Stereotype traps compound the effects of the many structural disadvantages that have previously been identified as causes of racial disparities in criminal involvement (Sampson et al. 2018, Sampson & Wilson 1995). Stereotype traps are discussed in Section 4.

2. STEREOTYPES AND CRIME

As of 2021, the National Incident-Based Reporting System (NIBRS) has fully replaced the earlier Summary Reporting System (SRS) for the tracking of crime incidents and the characteristics of victims and offenders. However, of the 18,806 agencies enrolled in the Uniform Crime Reporting Program, fewer than 12,000 submitted NIBRS data in 2021, and these agencies together served just two-thirds of the national population. Furthermore, the agencies submitting data are a nonrandom sample of all agencies, with large variations across states in participation rates and the omission of some of the largest police departments (Bur. Justice Stat. 2022, Li 2022).

As a result, the NIBRS is not a reliable source for tracking the total volume of offenses or arrests. However, the new system does contain an alternative taxonomy of crimes, broader coverage of incidents, and greater detail in reporting. Accordingly, we use this source to examine variations across crimes in the demographic characteristics of known offenders while taking care to verify that the particular patterns reported here are consistent with those found in earlier work.

The NIBRS classifies crime incidents based on a three-way taxonomy: crimes against property, against persons, and against society. This replaces an earlier distinction between violent crimes and property crimes. One key difference is the treatment of robbery, which is now grouped with burglary, larceny, and motor vehicle theft as a crime against property, although previously

grouped with murder, rape, and aggravated assault as violent crime. For reasons discussed in O'Flaherty & Sethi (2019), classification based on motives is more useful for understanding the role of stereotypes, and so we adopt the newer taxonomy here.

2.1. Crimes Against Property

The NIBRS database identifies twelve distinct categories of crime against property.[2] With the exception of vandalism and arson, these offenses are typically motivated by pecuniary gain. And among these crimes of appropriation, robbery is unusual in several respects.

By definition, robbery involves threat or use of force. A credible threat instills fear, and fear is potentially conditioned by stereotypes. Victims have very little time to react to a robbery demand and understand that the consequences of resistance can be very serious. Under these conditions, the physical appearance of a robber—including body size and shape, markers of race and gender, the presence or absence of facial tattoos, and so on—can have significant effects on the likelihood of victim compliance.

Resistance can be costly to robbers, and thus they tend to seek out victims who are likely to comply. That is, they are attracted to victims who are likely to stereotype them in ways that result in quick compliance. Ethnographic studies of active robbery offenders confirm that the victim selection decision is often considered very carefully, based primarily on the likelihood of compliance, and that stereotypes—including beliefs about the stereotypes held by others—are key determinants of these choices (Wright & Decker 1997).

These considerations do not arise in the case of other crimes of appropriation. Some involve no face-to-face-contact at all; this is typically the case with burglary, larceny, and motor vehicle theft. Others, such as bribery, do involve interactions between victims and offenders but without the threat or use of physical force. As a result, one might expect that the demographic profile of robbers differs in systematic ways from that of people involved in other crimes of appropriation. And indeed it does.

Figure 1 shows the distributions by sex and race among offenders for whom these characteristics are known, based on data from reporting agencies in 2021. Aside from the issue of underreporting discussed above, there are large variations across crimes in the degree to which offender characteristics are known, so these data need to be interpreted with some care.[3] But the general pattern observed in the figure is consistent with earlier findings based on arrests and victimization surveys over several years (O'Flaherty & Sethi 2008, Tonry 2011). Relative to other crimes against property, robbery is an outlier, with disproportionately high levels of involvement by Black men.

Black men are among the most negatively stereotyped groups in the American population for use of violence. Furthermore, the prevalence of such negative associations varies significantly across groups. Based on results from implicit association tests, Banaji & Greenwald (2013, p. 105) report that "the size of this automatic stereotype...is largest in Whites and Asians, next largest in Hispanics, and smallest in African Americans." Given the incentives to avoid victims who are unlikely to comply, one would expect robbery victimization to be concentrated among those most likely to hold negative stereotypes.

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[2]These are arson, bribery, burglary, forgery, vandalism, embezzlement, extortion, fraud, larceny, motor vehicle theft, robbery, and stolen property offenses.

[3]For instance, among robbers 8% have unknown sex and 6% have unknown race; the corresponding figures for burglars are 27% and 32%. In addition, stereotypes may lead to biases in visual processing and errors in classification (Agan 2023, Eberhardt et al. 2004).
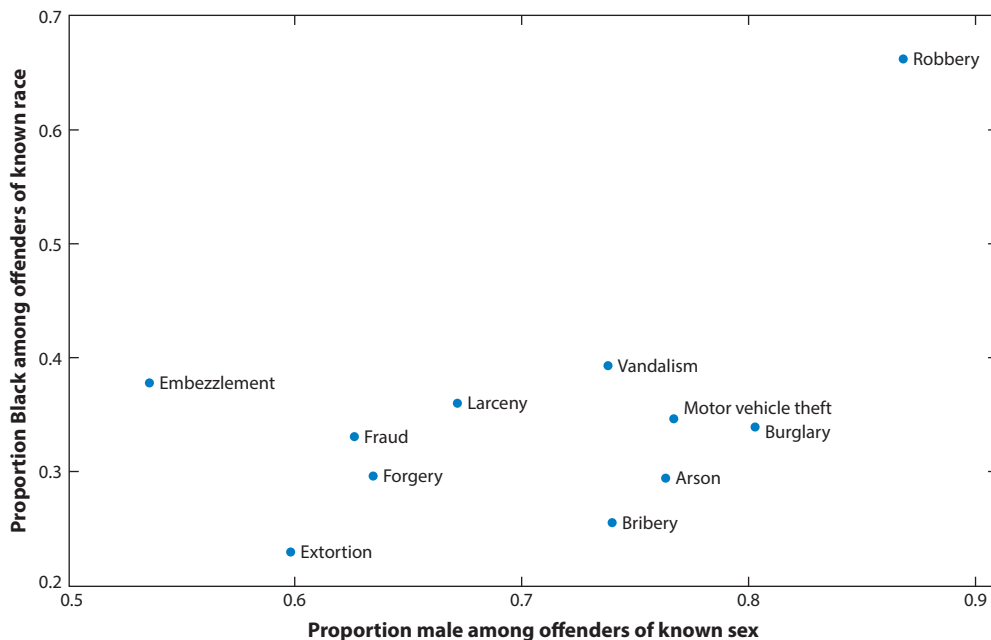
Figure 1

Crimes against property in reporting agencies, sex and race of offenders when known, 2021. Data from National Incident-Based Reporting System (**https://cde.ucr.cjis.gov/**).

Again, the data bear this out. Although most interpersonal crimes involve within-group interactions, robbery is different. Based on data from the National Crime Victimization Survey for the period 2012–2014, O'Flaherty & Sethi (2019) report that almost all single-offender robberies committed by Whites also involve White victims, whereas victims of robberies committed by Black offenders are as likely to be Black as White. That is, White offenders very rarely target Black victims, whereas Black offenders frequently target White victims. This is consistent with findings from earlier periods (O'Flaherty & Sethi 2008) and with ethnographic studies of active offenders (Wright & Decker 1997).

This perspective on the sorting of individuals across different crimes of appropriation has several implications. First, Black victims of robbery are more likely than White victims to encounter offenders who are desperate and cannot afford to be selective. Thus, when Black victims resist, they are more likely to face violence. White victims resist less frequently, but (conditional on resistance) they face a smaller likelihood of violence. One can estimate rates of resistance and forced compliance by using data on completion or failure of robbery attempts, combined with data on victim injury. These estimates confirm that resistance by White victims is both less frequent and more likely to be successful when attempted (O'Flaherty & Sethi 2008).

Second, declines over time in the incidence of robbery occur in part through the exit from the pool of active offenders of those who have alternative sources of income available to them. On average, these are also the individuals least likely to force compliance when faced with resistance. As a result, when robbery becomes less frequent it also becomes more violent. This, too, is consistent with the available evidence (O'Flaherty & Sethi 2009).

Third, areas with high robbery rates have relatively small White populations because the incentive to leave for safer locations is greatest for those who are targeted most frequently. This is

a channel through which residential segregation can arise, in addition to those that have been explored more commonly in the literature. Furthermore, precautionary measures and endogenous location choices help us understand why those who are selectively targeted for victimization are nevertheless underrepresented among robbery victims (O'Flaherty & Sethi 2007).

Finally, a significant and disturbing consequence of behavioral responses to negative stereotypes is that the population of people arrested and incarcerated differs from the overall population of offenders in ways that reinforce and entrench negative stereotypes. This is because robbery is more likely to lead to arrest and prison admission than other crimes of appropriation (Raphael & Stoll 2013) and carries significantly longer prison sentences (Kaeble 2021). This process of stereotype entrenchment is explored in more detail in Section 4 below. But first we examine the role of stereotypes in affecting murder and weapon law violations.

2.2. Crimes Against Persons and Society

The NIBRS database identifies five categories of crimes against persons and six against society.[4] As in the case of crimes against property, there are significant differences in the demographic composition of offenders.

Figure 2 shows characteristics of offenders (when known) for crimes against persons and against society in reporting agencies in 2021. Sex offenses are almost always committed by men, and men are also heavily over-represented among homicide offenders. But these two crimes are
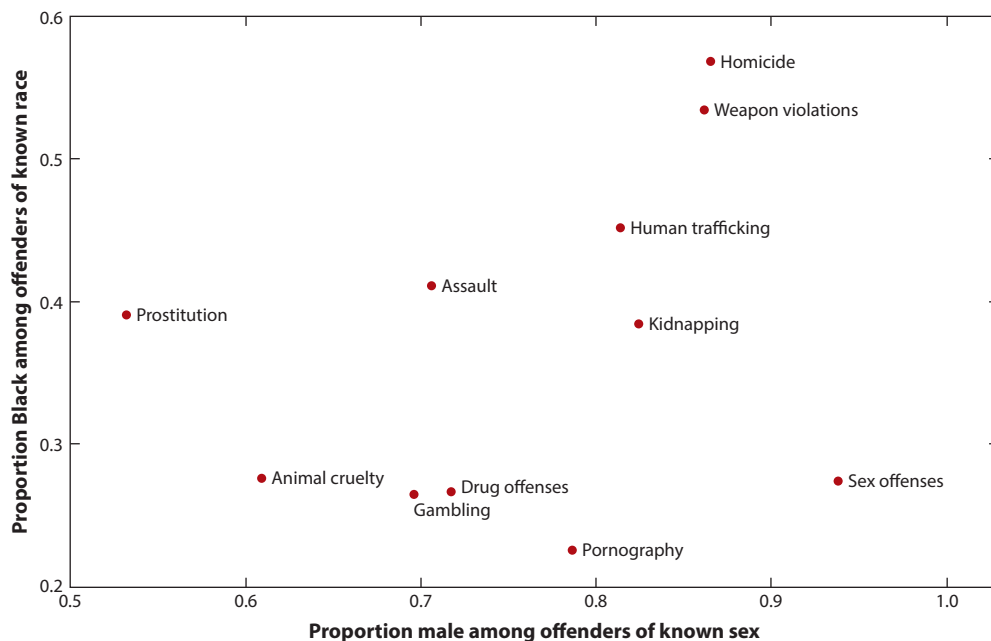
Figure 2

Crimes against persons and society in reporting agencies, sex and race of offenders when known, 2021. Data from National Incident-Based Reporting System (**https://cde.ucr.cjis.gov/**).

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[4]The five categories of crimes against persons are assault, homicide, human trafficking, kidnapping, and sex offenses. The six categories of crimes against society are animal cruelty, drug offenses, gambling, pornography, prostitution, and weapon law violations.

at opposite ends of the spectrum when it comes to race: Among crimes against persons, Black involvement is highest in the case of homicide and weapon law violations and lowest in the case of sex offenses. As in the case of robbery, this general empirical regularity may be found in other data sources covering earlier periods (Clegg & Usmani 2019, O'Flaherty & Sethi 2010a, Tonry 2011).

Unlike robbery, homicide is largely a within-group phenomenon. But homicide is unusual in its own way—it is the only serious crime that can be motivated by preemption. Fear of being killed can induce people to kill, even when no other motive for doing so exists. A significant proportion of homicides result from escalating disputes between parties who know very little about each other (O'Flaherty & Sethi 2010b). The disputes may begin over relatively trivial matters, but preemptive and retaliatory motives can amplify the risk. Preemption itself may be preempted and so on up the hierarchy of beliefs, to the point where the distinction between offensive and defensive action dissolves (Schelling 1960). The logic here is captured succinctly in a statement by 19-year-old Stefan Shaw of Philadelphia: "I'd rather throw a bullet than catch a bullet" (Palmer et al. 2021).[5]

Thus, fear plays a central role in understanding the prevalence of homicide, just as it does for robbery. But unlike the case of robbery, the fears that sustain high rates of homicide are not exaggerated stereotypes held by one group about another. Murder is largely an intragroup phenomenon, and fears are better calibrated to underlying realities. Moreover, one reason for fear is the expectation that others are themselves fearful and may take preemptive action as a consequence. Fearsomeness and fearfulness are two sides of the same coin.

The logic of preemption and retaliation also applies to weapon possession—the incentive to acquire a firearm rises with the overall prevalence of guns in a community. It is not surprising, therefore, that the demographics of weapon law violations are so similar to those of homicide. The same logic also explains why homicide is so highly concentrated, not just in physical space but also within social networks (Papachristos 2009, Papachristos et al. 2015).[6]

One consequence of this perspective is that stand-your-ground laws can result in an increase in killings. Such laws make it more likely that one can be killed with impunity by others and hence raise the incentives for preemptive action. Empirical work examining the causal effects of such laws has indeed found that they give rise to increased murder rates (Cheng & Hoekstra 2013, McClellan & Tekin 2017).

More generally, homicide rates tend to be elevated whenever there is a realistic fear of being killed with impunity. In environments with low murder clearance rates, where others can kill without fearing consequence, each individual faces strong motives to take preemptive action. And if preemption fails, people face incentives to take the law into their own hands. A reputation for retaliation can serve as a form of deterrence but needs to be built and sustained through explicit violent actions.

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[5]Preemption is also commonly implicated in homicides by victims of domestic violence. Adler (2006, p. 101) observes that between 1890 and 1910, as the rate of uxoricide surged in Chicago, so did the rate of mariticide, as "wives killed to protect themselves." Some cycles of violence arising from preemption and retaliation are legendary, such as the intergenerational feud between the Hatfield and McCoy families of Kentucky and West Virginia (Rice 1982).

[6]The concentration of homicide in physical space mirrors and is closely tied to the concentration of illicit trade in narcotics (O'Flaherty & Sethi 2010c, 2015). When transactions are prohibited by law, "market participants substitute guns for lawyers in the resolution of disputes" (Miron 2004), and the guns used in such cases are seldom legally acquired (Cook et al. 2007). Historically, violence rose during the Prohibition Era as a response to "broken contracts that did not lend themselves to polite resolution" (Okrent 2010). Owens (2014), Bodenhorn (2016), Dell (2015), Lindo & Padilla-Romo (2018), and Chimeli & Soares (2017) all consider the connection of violence to outlawed transactions.
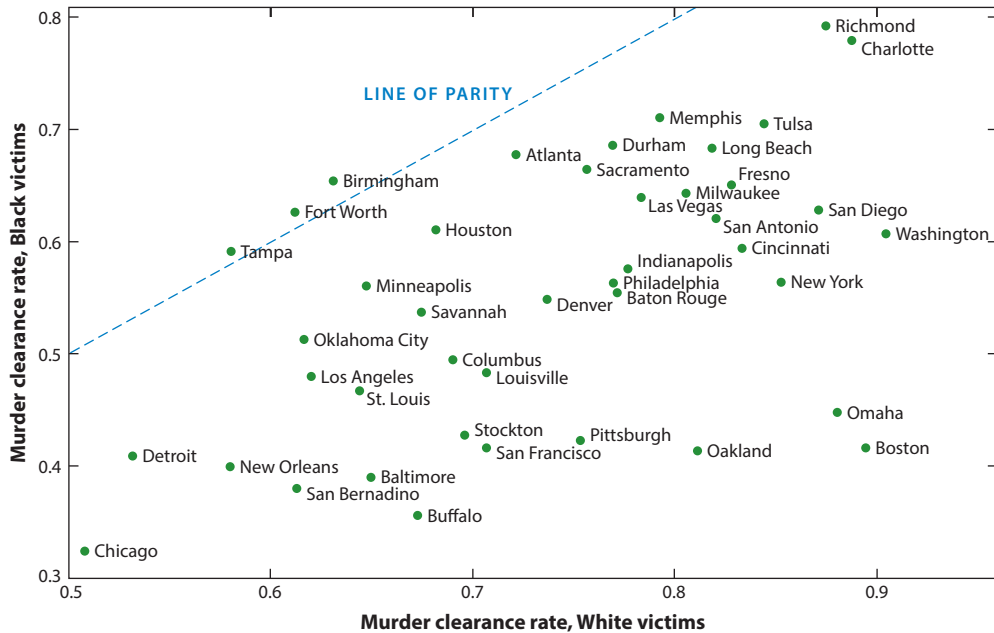
Figure 3

Murder clearance rates by victim race for 43 US cities. Data from Washington Post Investig. Team (2019).

Thus, high murder rates and low rates of murder clearance tend to go hand in hand. And it turns out murders with Black victims are less likely to be cleared than murders with victims drawn from other groups (Lowery et al. 2018). This is true both within and across cities, based on data assembled by the *Washington Post* covering more than 52,000 murders in fifty major cities over the period 2007–2017.

The *Post* data contain demographic information on murder victims as well as the disposition of the case, which falls into three categories: closed by arrest, closed without arrest, and open. Reasonably complete and reliable data are available for 43 of the cities.[7]

Figure 3 shows the clearance rate by victim race for this set of cities.[8] The dashed line represents points of parity, at which both groups of victims have the same clearance rates. Just three cities—Birmingham, Fort Worth, and Tampa—have rates close to parity; all other cities have clearly higher clearance rates for murders with White victims.[9]

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[7]Three cities (Dallas, Kansas City, and Phoenix) have no demographic breakdowns at all, two have a large proportion of cases without demographic information (Albuquerque with 22% and Miami with 37%), and two have no recorded victims with Hispanic ethnicity (Jacksonville and Nashville), suggesting that this group has been distributed across the other categories. We omit these cities from our analysis here.

[8]If one defines the clearance rate more narrowly to include only those murders that are cleared by arrest, a very similar picture emerges.

[9]Such disparities in clearance rates have existed for generations. In a study of a Mississippi community, Powdermaker (1939) found that less than a third of murders with Black victims resulted in convictions in 1933. For evidence from other times and places, see US Kerner Commission (1968), Anderson (1999), Lee (2005), Leovy (2015), Forman (2017), and O'Flaherty & Sethi (2019). Among murders that do result in convictions, there are sentencing disparities based on victim race—killers of Whites are more likely to be sentenced to death than those convicted of murder whose victims are Black (Baldus et al. 1997, Dodge 1990). Because

The figure also reveals large variations across cities in within-group clearance rates, suggesting considerable heterogeneity in police effectiveness overall. For example, the clearance rates for murders with White victims in Chicago and Detroit are much lower than that for murders with Black victims in Houston and Atlanta.

The likelihood of solving a murder depends on a wide range of factors, including the circumstances under which the killing occurs. A murder associated with domestic violence, for example, is more easily solved than one committed during a robbery. Part of the disparity in clearance rates could therefore stem from different distributions of murder circumstances across victim groups.

Some of the disparity may also be attributed to victim devaluation by police and those to whom the police are answerable (Keel et al. 2009). One mechanism through which victim devaluation operates is through the uneven distribution of investigative resources across communities relative to the murder rates they experience. But there is another factor at work—murder clearance depends crucially on witness cooperation, and there are substantial differences across communities in the rates at which this is forthcoming. This unwillingness to cooperate itself stems from a variety of causes, including antisnitching norms, distrust of police and prosecutors, and a credible fear of retaliation (Brunson & Wade 2019, Puckett & Lundman 2003, Rohrlich & Tulsky 1996).

Witness cooperation is most useful in clearing cases when the testimony of one witness is corroborated by another. A general expectation that witnesses will not come forward can therefore be self-fulfilling because a single uncorroborated witness faces especially grave risks and offers limited evidentiary value. That is, antisnitching norms and the associated fears of retaliation can be understood as equilibrium phenomena (O'Flaherty & Sethi 2010d). Such norms can also be hard to dislodge in the absence of trust between communities and police. And such distrust itself may be aggravated by generalized aggression in police practices and extensive racial profiling, even if such profiling is based on statistically accurate beliefs and is motivated by legitimate law enforcement goals. We consider these issues next.

3. STEREOTYPES AND POLICING

3.1. Stops and Searches

Much of the empirical literature on racial profiling in stops and searches has focused on whether discrimination is based on statistically accurate beliefs and the pursuit of a legitimate law enforcement objective or whether it involves malign motives or biased beliefs about selectively targeted groups. The former case is referred to as statistical or strategic discrimination, the latter as preference-based or prejudiced discrimination (Kennedy 1998). We discuss the adequacy of this taxonomy below but first review some of the main findings in this literature.

One approach to determining whether discrimination is strategic or prejudiced involves the hit-rate test, originally proposed by Becker (1957). Suppose that searches of individuals are motivated by contraband recovery, and one group faces prejudice in the sense that they are searched even when the likelihood of finding an illicit substance is low. The result is that the rate of contraband recovery is lower in the group that faces prejudice, relative to a group that does not.

More precisely, the hit-rate test applies only to marginal individuals in each group—those who are on the cusp of the threshold of suspicion. In the absence of prejudice, all groups face the same

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murder is largely an intraracial phenomenon, this means that Whites convicted of murder are more likely to face the death penalty on average. However, there is also some evidence that among Black defendants who are convicted of killing Whites, those with more stereotypical features are more likely to face capital punishment (Eberhardt et al. 2006).

threshold of suspicion, and hence the contraband recovery rates for marginal individuals should be the same across all groups. If one finds differences across groups in these recovery rates, the group with the lower recovery rate can be assumed to be facing prejudice (Ayres 2002).

A significant problem with this test is that the marginal individuals in each group—those who barely exceed the threshold of suspicion—are not easy to identify. Under certain (very stringent) assumptions, the average hit-rate can be used instead, and this is much easier to compute. In an influential study of vehicle stops and searches by Maryland State Police on the I-95 highway, Knowles et al. (2001) examined average hit-rates and concluded that searches were free of prejudice. That is, they could not reject the hypothesis that profiling was motivated exclusively by maximizing rates of contraband recovery.

Consistent with this view, Anwar & Fang (2006) found that differences in average hit-rates across groups of drivers appear not to depend on the race of the trooper making the search, based on data from the Florida State Highway Patrol. However, in a study of stops and searches by the Boston Police Department, Antonovics & Knight (2009) found that White officers were more likely than Black officers to search vehicles driven by Black drivers, even after controlling for a range of contextual factors.

An alternative approach to detecting the presence of prejudice, initially proposed by Grogger & Ridgeway (2006), is known as the veil-of-darkness test. The idea here is that the race of a driver is much easier to discern in daylight hours, so the presence of prejudice can be detected by seeing whether racial disparities in police stops vary sharply and systematically as day turns into night. To account for differences in driving populations and patterns at different hours, Grogger & Ridgeway (2006) used discrete changes such as clock adjustments associated with the start or end of daylight savings time. Such changes affect the degree of darkness at any given clock hour, without necessarily changing the population of drivers or their behavior. Using this approach, the authors find little evidence of prejudice in data from Oakland. In contrast, Horrace & Rohlin (2016) did find evidence of prejudice using a similar approach in Syracuse.[10]

This kind of inconsistency in results from different jurisdictions is common in the literature, suggesting the need for studies with broad geographic coverage. Pierson et al. (2020) have done exactly this, using data on a hundred million stops nationwide. Their application of the veil-of-darkness test does uncover prejudice in vehicle stops. In addition, the authors use data on contraband recovery to implement a version of the hit-rate test and find evidence of prejudice in searches conditional on a stop.

Following a Supreme Court ruling in *Terry v. Ohio* (1968), stops and searches of pedestrians and vehicles are conducted under a standard of "reasonable suspicion" that is more permissive than the probable cause standard applied for searches of homes. Even so, the basis for suspicion must be "articulable" and the recording of these data can be useful in detecting prejudice. In a large study of pedestrian stops in New York City over the period 2008–2012, Goel et al. (2016) found that among stops that were explicitly motivated by suspected criminal possession of a weapon, only about three percent actually resulted in weapon recovery (in most cases, knives). They estimate

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[10]Kalinowski et al. (2017) observe that veil-of-darkness tests might underestimate discrimination if drivers who suspect selective targeting in daylight hours choose to drive (or to drive faster) at night. Using racial disparities in speeds, they find evidence to support the hypothesis that Black drivers in Massachusetts perceive that they will be profiled when markers of race are visible. It is possible that disparities in recorded speeds may reflect differential leniency on the part of officers, as found by Goncalves & Mello (2021), but Aggarwal et al. (2022) have data on actual speeds of Florida Lyft drivers and find that conditional on speed, Black (and other minority) drivers are indeed more likely to be stopped. Taylor (2020) provides direct evidence that Black men raised in the Jim Crow South opted to drive at night, especially on long journeys.

that better targeting of enforcement would allow for the recovery of 90% of weapons using only 60% of stops. Furthermore, an adjustment of strategy along these lines would result in less racial imbalance in stops, suggesting the presence of prejudiced discrimination in the data.

The distinction between strategic and prejudiced discrimination is useful for some purposes, but from the point of view of someone who is marked for suspicion based on race, that scarcely matters. There is always some subjective uncertainty about officer motives in the mind of a civilian who has been detained. Furthermore, even if officers were acting in a prejudice-free manner, profiling is demeaning and selectively curtails the deliberative freedoms of individuals in targeted groups (O'Flaherty et al. 2023). This has welfare effects that need to be accounted for as well as general equilibrium effects that involve reduced rates of witness cooperation, lower murder clearance rates, and an elevated incidence of homicide. Stops and searches based on racial stereotypes, even if statistically accurate and motivated by legitimate law enforcement goals such as contraband recovery, can compromise the ability of authorities to achieve higher-order objectives such as the provision of public safety.

3.2. Deadly Force

In Section 2.2, we observed that fear of being killed can induce people to kill preemptively. Such fears are also relevant in police–civilian interactions. In fact, following the ruling in *Tennessee v. Garner* (1985), police may use lethal force only if there is "probable cause to believe that the suspect poses a significant threat of death or serious physical injury." That is, fear is the only legitimate basis for the use of lethal force by law enforcement officers under the federal standard.

The rate at which police kill civilians in the United States far exceeds the rates found in democracies at comparable levels of prosperity, although several countries in Latin America have even higher rates of fatal police violence (Hirschfield 2023, Sherman 2018, Zimring 2017). Many of the most widely publicized killings involve White officers facing Black civilians, and some of these appear to reveal unwarranted fear on the part of the officers. This raises the possibility that racial stereotypes may be implicated.

Perhaps the clearest case of unwarranted fear involved the (nonfatal) shooting of Levar Jones by Sean Groubert at a South Carolina gas station in 2014. This incident was captured on the officer's dashcam video from start to finish, and Groubert was dismissed by the South Carolina Department of Public Safety (2014) for having "reacted to a perceived threat where there was none." Groubert would eventually plead guilty to aggravated assault and was sentenced to five years in prison.

Another case in which unwarranted fear seems to have played a role was the fatal shooting in 2016 of Philando Castile by Jeronimo Yanez in Falcon Heights, Minnesota. Castile's girlfriend was in the passenger seat beside him, with her four-year-old daughter in the back of the vehicle. The officer in this case was charged with manslaughter on the grounds that the shooting was not "objectively reasonable and necessary, given the totality of the circumstances" (Choi 2016). The role of racial stereotypes in giving rise to unwarranted fear cannot be determined in any particular instance, but several observers, including the governor of Minnesota, were persuaded that this factor was decisive in the Castile case (Moskos 2016, Smith et al. 2016). Even so, there was enough doubt in the minds of jurors about the officer's criminal culpability, and Yanez was acquitted at trial.

Anecdotal evidence of this kind is useful in identifying the manner in which stereotypes can condition behavior but cannot tell us how widespread such effects are. For that, we need to turn to data. Official sources of data on the use of deadly force are notoriously unreliable, missing about half of all incidents (Zimring 2017). This gap has been filled in recent years by media outlets such

Table 1   Fatal shootings by police, 2015–2022

Year	Total	White	Black	Hispanic	Other
2015	995	52%	27%	18%	4%
2016	958	51%	26%	18%	4%
2017	983	51%	25%	20%	5%
2018	992	51%	25%	19%	5%
2019	997	48%	28%	19%	5%
2020	1,019	51%	27%	19%	3%
2021	1,048	53%	28%	16%	3%
2022	1,096	52%	30%	16%	3%

Data from Washington Post (2023).

as the *Guardian* and the *Washington Post* as well as crowdsourced efforts by organizations such as Fatal Encounters and Mapping Police Violence.

The *Post* data track fatalities resulting from firearm discharges by on-duty officers since 2015. We focus on these data here because preemptive killings based on fear are most likely to involve shootings.[11] **Table 1** shows the demographic composition of those killed in this manner, excluding those whose race/ethnicity is not (yet) known.[12] There is considerable consistency across years in this demographic profile, with about half of those killed being White, 25–30% being Black, and most of the remainder being Hispanic.[13]

Relative to their share in the total population, which is below 14%, it is clear that Black civilians are overrepresented among victims of fatal force. However, over the period in question, approximately 27% of arrestees were Black, roughly in line with exposure to deadly force. This has led some to argue that although there may be prejudice in the initiation of contacts, there is little evidence of bias in exposure to lethal force conditional on interactions.[14] O'Flaherty & Sethi (2019) refer to this as the contact hypothesis.

Fryer (2019) argues that a proper test of the contact hypothesis requires information on interactions that could plausibly have led to the use of deadly force but did not do so, and this kind of information is unavailable in data sets that include only those interactions that actually resulted in a fatality. To conduct such an analysis, he examines a large set of incident reports provided by the Houston Police Department, focusing on a set of arrest categories that could arguably involve an objective threat faced by an officer.[15] He compares the demographic characteristics of the civilian population involved in these interactions with those in a separate pool of incidents that involved a weapon discharge by an officer. Fryer finds that 58% of the civilians in the arrest

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[11]This excludes some of the most dramatic and salient incidents in recent years, including the killings of George Floyd in 2020 and Tyre Nichols in 2022. Although these may have involved criminal acts of brutality or callous indifference to human life, it is unlikely that they were the result of a preemptive intent to kill.

[12]The number of people killed whose race/ethnicity remains undetermined is much higher in the most recent years (20% in 2021 and 31% in 2022), as many details have yet to emerge about these cases. As more information comes to light the overall demographic picture will shift, especially if these cases are unrepresentative.

[13]Native Americans are killed at very high rates relative to their share of the population, but this share is small relative to the three largest groups. Asians are killed at very low rates relative to their presence in the population, which itself is relatively small.

[14]See Mullainathan (2015) for an informal argument along these lines.

[15]These categories include attempted capital murder of a police officer, aggravated assault on a public safety officer, resisting arrest, evading arrest, and interfering in an arrest.

Table 2 Fatal shootings by police and annual rates of exposure to deadly force per million population, 2015–2022

City	Fatalities				Rates			
	Total	**White**	**Black**	**Hispanic**	**Total**	**White**	**Black**	**Hispanic**
New York City	44	2	24	7	0.62	0.09	1.69	0.35
Los Angeles	130	18	27	70	4.17	2.00	10.46	4.78
Chicago	50	2	37	8	2.28	0.29	5.87	1.22
Houston	90	12	42	19	4.88	2.75	10.30	2.34
Phoenix	104	32	17	33	8.08	5.95	17.93	6.24

Data from Washington Post (2023) and US Census Bureau (2023).

pool were Black, and the corresponding proportion in the pool facing a weapon discharge was somewhat lower, at 52%. He presents this as evidence in support of the contact hypothesis and argues that this claim is robust in the sense that controlling statistically for encounter characteristics (such as location, time of day, or weapon possession by the civilian) does not overturn the baseline findings.[16]

This analysis has been contested on multiple grounds. One concern is that bias in the process of contact initiation (as discussed in Section 3.1) implies that the qualitative nature of police–civilian interactions cannot be assumed to be the same across different groups of civilians. If Black civilians are arrested under circumstances that would not result in contact initiation if they were White, then the pool of arrestees will be inflated by the presence of individuals who pose little or no threat to police, and this set of individuals will be disproportionately Black. A direct comparison between the demographic characteristics of arrestees and those subjected to weapon discharges would then be misleading unless the objective threats faced by officers could be precisely measured (Durlauf & Heckman 2020, Knox et al. 2020, O'Flaherty & Sethi 2019).[17]

There is a further problem with the contact hypothesis—geographic variation in the use of deadly force vastly exceeds the variation across jurisdictions in reported violent crime, arrest, or other measures of police–civilian contact (Edwards et al. 2019, O'Flaherty & Sethi 2019, Schwartz & Jahn 2020). **Table 2** shows exposure to fatal police shootings by race/ethnicity across the five largest cities in the United States, based on the *Post* data. Within each city, Black exposure exceeds White exposure by a substantial margin, with Hispanic exposure lying between the two in four of the five cases. But the geographic variation is so great that White residents of Los Angeles, Houston, and Phoenix are more likely to be fatally shot by police than Black residents of New York City.

Such variations cannot be accounted for by differences in contact rates. For instance, the same spatial patterns arise when one looks at the incidence of lethal force relative to reported violent crime (O'Flaherty & Sethi 2022). This points to the importance of selection, training, leadership, and organizational culture. Sherman (2018) has argued that police killings ought not to be seen as acts for which the officers on the scene bear full responsibility: They are failures in a complex system with several decision points at different stages, and the choices made at these points all contribute to the final outcome. The analogy here is to an airplane crash, which requires several failures to occur jointly. This approach to understanding and reducing the incidence of deadly force needs further elaboration.

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[16]Fryer (2019) does find evidence of prejudice in the use of nonlethal force.
[17]In addition, many police shootings arise under conditions where no unlawful activity was occurring and hence would not have resulted in an arrest in any case. This is true with both the Jones and Castile cases discussed above.

4. STEREOTYPE TRAPS

Stereotypes do not arise in a vacuum. Perceptions of criminality are influenced by the kinds of visual and other cues that bombard us daily—including photos and videos of suspects, arrestees, defendants, and prisoners. But these cues are not based on a random sample of criminal offenders: They are disproportionately concentrated on those who are most likely to be arrested, admitted to prison, and given long sentences.

Consider, for instance, three serious crimes against property—robbery, burglary, and motor vehicle theft. For each of these offenses, Raphael & Stoll (2013, table 2.2) report the overall incidence of crime, the likelihood of arrest conditional on crime, and the likelihood of prison admission conditional on arrest. They do so for three different years, 1984, 2004, and 2009. Among these three offenses, robbery constitutes 11–12% of crimes, 20–25% of arrestees, and 34–37% of prison admissions. That is, those engaged in robbery end up in prison at much higher rates than those engaged in burglary and motor vehicle theft. Furthermore, sentences are much longer for robbery than for the other two crimes: median time served in 2018 was 11 months for motor vehicle theft, 17 months for burglary, and over three years for robbery (Kaeble 2021). Mean time served is larger for all three offenses but exhibits very similar differentials.

One consequence of this is the emergence of a stereotype trap. Those who are believed to be violent find robbery easier to commit because they will face less resistance. But robbery leads to arrest and prison admission at much higher rates than these other crimes and results in significantly longer sentences. Because those already burdened by negative stereotypes tend to favor robbery over other crimes of appropriation, these stereotypes can become reinforced and entrenched through the operation of the justice system, even if the system itself operates without bias (Harcourt 2007, Sethi 2020).

Stereotype traps also affect murder and weapon law violations—those who are feared face a heightened risk of preemptive violence, from each other and from law enforcement officers. Such fears are amplified by low clearance rates for homicides, held in place by negligible rates of witness cooperation. Breaking out of this cycle requires the building of trust between police and the communities they serve and the avoidance of heavy-handed tactics that ensnare large numbers of innocents.

Although some crimes lead to the widespread distribution of suspect images and video and result in high rates of arrest and prison admission, others are committed by faceless offenders operating in cubicles halfway around the world. In 2021, the FBI's Internet Crime Complaint Center received more than 800,000 reports with associated losses amounting to more than $10 billion (FBI 2023). These losses were borne disproportionately by the elderly, many of whom fell victim to scams that drained their savings. The rapid growth of cybercrime has introduced new words into our lexicon—phishing, malware, and ransomware are already familiar, and vishing, smishing, pharming, sextortion, and scareware are quickly becoming so. The offenders in such cases are often residents of countries with limited incentives and capacities for enforcement (Bhattacharjee 2021). As a result, the criminal activities of some do not damage the reputations of their coethnics worldwide. This escape from tarnished reputations for the fortunate is the flip side of the stereotype trap to which the less fortunate are exposed.

5. CONCLUSIONS

Our focus here has been on crime and policing, but stereotypes affect interactions at all points in the justice system, including bail decisions, peremptory challenges, jury deliberation, sentencing, probation, and parole. Kennedy (1998) was among the earliest scholars to discuss these issues in a systematic manner. Space limitations preclude us from providing a comprehensive review of

the subsequent literature, but we point the reader to McIntyre & Baradaran (2013), Kleinberg et al. (2018), and Arnold et al. (2018, 2022) on bail decisions; Alexander (2010), Sklansky (1995), and Bunting et al. (2013) on differential enforcement of drug laws; Barnes et al. (2015) on arrest disparities; Pettit & Western (2004), Abrams et al. (2012), and Rehavi & Starr (2014) on sentencing disparities; Holzer et al. (2006) on labor market discrimination against applicants stereotyped as likely to have a criminal record; and Agan & Starr (2018), Craigie (2020), and Doleac & Hansen (2020) on how labor market discrimination can result in unintended negative consequences of ban-the-box policies. More broadly, Raphael & Stoll (2013) and Pfaff (2017) offer detailed overviews of the drivers of mass incarceration, and Loury (2002) considers the role of racial stigma in widespread acceptance among the general public of highly punitive responses to crime.

As Garland (2023, p. 54) has observed, those intent on transforming criminal justice in the United States "need to acknowledge the facts of differential criminal involvement" in homicide and robbery but also "need to explain how this fact pattern emerged and identify the structural causes that produce and reproduce it." He points to "segregation, economic exclusion, high school noncompletion, long-term poverty, family breakdown, and the absence of social services" as key contributing factors, arguing that differential involvement in crime is "neither natural nor inevitable" and not attributable to "racially specific moral failures or cultural differences." We agree entirely with this assessment but would add that one also needs to consider the incentive effects of stereotypes on crime involvement and the reinforcement and entrenchment of stereotypes that occur as a result of participation in precisely those activities that lead to the highest rates of arrest, prison admission, and time served. Recognizing the existence of a stereotype trap is a necessary first step if one is to break out of its unrelenting and powerful grip.

DISCLOSURE STATEMENT

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