CHRIS MILLER • PAUL GUERIN PH.D. • DAN CATHEY MPA

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Bias-Based Policing: a Literature Review

Introduction: Theory and History

Variably called bias-based policing, racial profiling, or Driving While Black or Brown, the phenomenon of apparent disparate treatment of minorities by police has received considerable attention from the media, academics, politicians, and government organizations in recent years. A common contention is that the history of racial discrimination in the U.S. combined with practices employed by local, state, and federal law enforcement officials prominent in the 1980s and 1990s as part of the 'War on Drugs' (e.g. the use of drug courier profiles disseminated by the U.S. Department of Justice to state police [Warren et al. 2006)]) caused minorities to be targeted disproportionately by traffic enforcement officers (Warren et al 2006; Engel & Calnon 2004; Meehan & Ponder 2002; Ridgeway 2006; Smith et al. 2003).

Despite substantial public concern over the issue, much of the academic and governmental research on this topic lacks adequate theoretical development with important ramifications for the findings and research based public policy solutions (Engel et al. 2002). While all research contains implicit theoretical bases, much of the research on racial disparity in policing thus far has not identified explicit theoretical claims (ibid). As a result, much of this research notes the disparity in police action taken against minorities (prevalent among virtually all studies) but fails to sufficiently explain why this occurs while implying or claiming that racial discrimination is the primary causal variable (ibid).

A number of researchers, however, have attempted to develop an explicit theoretical framework. For example, while they do not empirically examine them, Warren et al. (2006) offer 4 possible explanations. The first is deliberate racial profiling. This could take two forms: the use of race in drug interdiction profiles, or 'out of place' profiling in which minorities traveling in predominantly white neighborhoods are targeted for looking 'suspicious'. The second possible explanation regards police deployment. Police officers are more concentrated in higher crime areas which tend to be communities of lower socio-economic status and often have a disproportionate number of minority residents. Therefore, "although higher police deployment in minority neighborhoods is not necessarily a result of a racial bias process, it may produce an unintentional race bias in police vehicle stops because of the heightened activity in these neighborhoods" (ibid). Additionally, different police departments may have different missions. For example, the state police may focus more on traffic enforcement on highways while municipal police may be more oriented towards making DWI or drug arrests (or vice versa). A third possible explanation is that police officers may harbor unconscious biases or stereotypes that, while they are not overtly racist in nature, may result in disparate treatment of minorities. And finally, perhaps some or many officers are simply racists that abuse their power to unfairly target minorities.

Similar to the "out of place" theory suggested by Warren et al. (2006), Withrow (2004) suggests the theory of "Contextual Attentiveness." This contains three components. First, police officers use the circumstances of a particular temporal or spatial context to determine what is 'normal.' Second, people or behaviors inconsistent with the officer's conception of 'normal' for the context will draw the officer's attention. Third, once the officer determines that a behavior is 'out of place' they will seek pretextual grounds to initiate an official contact.

One group of researchers (Parker et al. 2004) suggest that research on racial bias in policing should be done at

EXECUTIVE SUMMARY

- Bias-based policing is somewhat difficult to define yet most definitions generally consider bias-based policing to be the use of race as the sole or primary factor in the decision of a police officer to initiate a contact with a civilian.
- Much of the research on bias-based policing lacks sufficient theoretical development.
- There are four theoretical explanations offered by the literature.
  - Deliberate racial profiling.
    - Use of race in drug interdiction profiles.
    - "Out of place" profiling.
  - Police deployment is structured in such a way that more minority areas are targeted because those areas are associated with higher crime rates.
  - Police officers harbor unconscious racial stereotypes that result in a selective bias in decisions to initiate a contact with citizens.
  - Some or many officers are racists that use their power to unfairly target minorities.
- Bias in policing can occur at various stages in traffic enforcement.
  - The decision to stop.
  - The disposition of the stop.
  - The decision to search the driver and/or the vehicle.
  - The use or threat of the use of force.
  - The duration of the stop.
- There are five methods of data collection, each with different strengths and weaknesses.
  - Stop forms filled out by officers for every stop made.
  - Survey of drivers and/or police officers.
  - Direct observation of police officers in the field.
  - Review of official police records.
  - Focus groups conducted with the public and police officers.
- There are six methods of establishing a baseline (the rate at which one would expect different demographic groups to be stopped and/or searched). Each method has weaknesses and strengths.
  - Aggregate population data.
  - Motor vehicle department data.
  - Survey.
  - Direct observation.
  - Not-at-fault accident rates.
  - The 'veil of darkness'.

- Bias in stop rates
  - Virtually all studies examined found that minorities are stopped more than whites.
  - The studies varied in their confidence to attribute the disparate stop rates of minorities to racial bias of police officers.
  - Other important variables for explaining different stop rates were driver age, driver gender, time of the stop, the driver being a minority of the population in a given neighborhood (e.g. an African American in a predominantly white area or a white in a predominantly African American area), and socio-economic status.
  - Interestingly, the rare studies that accounted for officer race found that the race of the police officer had no bearing on disparate stop rates.
- Bias in searches
  - Virtually all studies examined found that minorities are searched more than whites.
  - The studies varied in their confidence to attribute the disparate search rates of minorities to racial bias of police officers.
  - Other important variables for explaining different search rates were driver age, gender, and other contextual factors.
  - In examining search rates, it is important to distinguish between low discretion searches (searches that are standard procedure such as searches incident to arrest) and high discretion searches (such as consent searches).
- Citations, arrests, and the use of force
  - Virtually all studies examined found that minorities were more likely to receive a citation, be arrested, and have force either threatened or actually used against them.
  - The studies varied in their confidence to attribute these disparate rates to racial bias of police officers.
- Perceptions of the police
  - A number of studies found that minorities are less likely than whites to perceive the reason for police action taken against them as legitimate and less likely to perceive the officers as having acted properly.
- Duration of the stop
  - The only study that examined the duration of the stop found that minorities are stopped for a longer time.

the community level in order to account for the considerable differences that exist between different communities. Demographic, economic, and crime rate differences vary greatly across cities, states, and the country as a whole and researchers should account for these differences.

As indicated by the differing conceptions of the dependent variable in much of the empirical literature (discussed in greater detail below), racial bias can occur at various stages in the police-citizen interaction. Bias may be present in the decision to stop, search, warn, cite, arrest, or use force with a driver. Furthermore, bias may be present in the use of pretextual reasons to initiate a stop.

DATA AND METHODS

The literature contains considerable variation in data collection methods, the data items collected, ways to establish a baseline or benchmark to compare apparently disparate treatment, independent variables considered, and conceptions of the dependent variable.

Data Collection Methods

Police Stop Forms
One of the most common data collection methods is the use of stop forms by police. As of 2002, more than 400 police agencies were collecting stop data and 14 states had mandated the practice (McMahon 2002). Because there is so much of this data available, a great many researchers tend to use it. Furthermore, this is a popular method because it is relatively inexpensive. While there is some variation in the items collected, most stop forms include information regarding the police organization, the time, place, and reason for the stop, demographic information (age, race, gender) of the officer and the stopped person(s), whether a search was conducted, the results of the search if it was conducted, and the disposition of the stop. The researchers who used these data (Cordner et al. 2002; Gaines 2003; Lange 2005; Parker 2004; Ridgeway 2006; Pickerill et al.; Smith & Petrocelli 2001; Smith et al. 2003; Cox et al. 2001) identified a number of problems.

The first and most important problem is insuring officer compliance and accuracy. For example, in a study done for the San Diego Police Department, Cordner et al. (2002) note a 28.4% decrease in stop forms from 2000-2001. Furthermore, compliance for 2001 was estimated at only 60%. Concerns over the representativeness of stop forms completed were

exasperated by the fact that patrol divisions with the greatest decreases in stop forms were from minority districts. Additionally, stops made between midnight and noon accounted for all of the decrease in stops. In focus groups, officers provided three possible reasons for the decrease: (1) many officers thought the data collection was going to stop as of June 2001, (2) some officers grew tired of the process, and (3) special events during the summer required a redistribution of police resources away from traffic enforcement. Furthermore, 2001 saw a 9% decrease in citations. Withrow (2004) found a 30.7% decrease in stops by the Wichita, KS police department between two consecutive corresponding time periods. He claims that the decrease can be accounted for by an administrative change which decentralized the traffic enforcement unit. Gaines (2003) observed a 10.4% decrease in stop forms filled out by the Riverside, CA police department between two separate years. Smith & Petrocelli (2001) found a 64% compliance rate among Richmond, VA police officers (by comparing stop form rates with stop rates from the Computer Aided Dispatch records). These disparities across time and compliance rates raise serious questions about the representativeness and validity of data collected via the stop form method.

Ideally, if this method is to be used, a number of steps could be taken by the state legislature, police departments, and researchers to insure that compliance rates are high. Researchers and police departments should collaborate in the creation of the stop form. Doing so would insure that all the necessary information is included, that police departments understand the purposes of the data collection effort, and to avoid any procedural issues that may hamper compliance. Once a data collection instrument has been created, data collection should be mandated by statute. Thereafter, each department should adopt procedures to insure compliance. Within departments it may be helpful to have the Chief of police or another high ranking officer explain the data collection process and emphasize the necessity for compliance. Additional department-specific measures could be adopted to insure that officer's complete the stop form for every stop.

A separate problem of the stop form data collection method is matching definitions across different data sets (McMahon 2002). For example, many of the stop forms require that the officer note the race of the driver based on the officer's perception. Yet, race may be defined differently in the data set with which the stop rate is compared such as the Census or the Motor Vehicle Department.

Survey

Another popular data collection method is the use of surveys. Currently, the Bureau of Justice Statistics conducts surveys every 2-3 years on police-citizen contact. Two of the articles reviewed (Engel & Calnon 2004; Lundman & Kaufmann 2003) used data from the 1999 survey. Charles et al. (2004) adapted the BJS survey for a study in Virginia. A survey was also conducted in North Carolina in 2000 as part of "The North Carolina Highway Traffic Study: Final Report to the National Institute of Justice: U.S. Department of Justice" (Smith et al. 2003).

Surveys provide a number of benefits. Perhaps the greatest advantage of this method is that it allows the researcher to account for more variables. As noted above, stop forms tend to include data regarding the police organization of the officer, the time, place, and reason for the stop, demographic information (age, race, gender) of the officer and the stopped person(s), whether a search was conducted, the results of the search if it was conducted, and the disposition of the stop. In addition, with a survey one can account for driver behaviors such as risky driving habits, methods used to avoiding being pulled over, the amount of miles driven, geographical driving patterns, and any other behaviors the researchers wish to examine (all of these behaviors were accounted for in the North Carolina Survey). As such, the survey method can be employed to establish differences in driving behaviors across racial groups and this can possibly help to explain disparate stop and search rates. Also, other variables such as socio-economic status and car type can be accounted for with the survey method.

This method is not without drawbacks. Some research suggests that minorities tend to underreport socially undesirable behaviors at higher rates than Whites (Tomaskovic-Devey et al. 2006). In a reverse record check of North Carolina drivers who had received a citation in the previous 12 month period, Tomaskovic-Devey et al. (ibid) found that African Americans admitted to being stopped 71% of the time and whites admitted to being stopped 77% of the time. Thus, survey data may have there own reliability issues. Additionally, surveys can be expensive and time consuming.

Direct Observation

While none of the articles reviewed employed the method of riding along with officers to directly observe police action, this is a conceivable method to use. One potential drawback is officers may alter their behavior while being observed. Furthermore, some police departments may resist this method as the researcher may 'get in the way' if problems are encountered in a traffic stop or the researcher's safety may be in jeopardy.

Examining Official Records

Examining traffic disposition (citation, arrest, etc.) records is another possible method. This method does not account for stops that did not result in a record of the stop, such as a citation. Many contend that police will commonly stop a vehicle for a minor offense as a pretext because the officer believes the driver may be engaged in some other form of illegal activity. This method would miss these stops.

Focus Groups

Three of the studies reviewed conducted focus group meetings. In two of the studies (Charles et al. 2004, Smith et al. 2003) the researchers conducted focus group meetings with both the general population and police officers. Another (Cordner 2002) did so only with police officers. This qualitative measure can allow the researcher to understand in greater depth both citizen and officer perceptions of the issue of racial bias in policing. This may be particularly useful to do while constructing the quantitative section of a research project as it can help the researcher to understand important variables to consider across different spatial, temporal, and organizational contexts.

Establishing a Baseline

One of the most important and vexing issues in racial profiling research is establishing a comparison group, or baseline, with which to contrast the rates of police action against minorities. Ideally, one could ascertain the racial composition of the offending population for a given geographical area and offense. Unfortunately this can be both a costly and time consuming process. Therefore, while some researchers have endeavored to establish this baseline (Lange 2005; Meehan & Ponder 2002; Smith et al. 2003), most have used various proxy measures (Cordner 2001; Gaines 2003; Smith & Petrocelli 2001; Engel & Calnon 2004; Smith et al. 2003).

One common, but very poor method, is the use of aggregate data from the U.S. Census Bureau to establish the proportion of the area that is minority, and then comparing that with stop rates and other police actions (Cordner 2001; Gaines 2003; Smith & Petrocelli 2001). This method is not very good for several reasons. First, the Census Bureau only conducts a census every ten years. Furthermore, different racial groups may not drive; much less break the law, in numbers proportionate to their representation in the general population. Also,

Gaines (2003) notes that minorities tend to be underreported in the Census.

Another method is to compare police action rates to the composition of the driving age population from either the records of the Motor Vehicle Department or the National Personal Transportation Survey (Engel & Calnon 2004). While this is a better method because it distinguishes between those more likely to drive and those less likely to drive, it fails to consider possible disparities in offense rates.

As noted above, a baseline of violators can be established using a survey. If the survey includes information on previous citations and driving behavior for a given population, a picture of the composition of the offending population can be established. As stated above, minorities tend to underreport socially unfavorable behaviors (Tomaskovic-Devey et al. 2006).

Another method is the use of cameras (Lange 2005). One researcher (ibid) used cameras that were triggered by radar when a driver was 15 M.P.H. over the speed limit (a speed at which the police in the jurisdiction indicated they would be very likely to stop the driver). Additionally, the cameras were randomly triggered at different times. The photos were subsequently examined by a panel of research assistants to determine the race of the drivers.

Another direct observation method was to simply drive a car full of research assistants at the speed limit, or slightly above it, and observe the race of drivers that pass by (Meehan & Ponder 2002; Smith et al. 2003). In addition, in one study (Smith et al. 2003) the speed of the driver was estimated by measuring the time it took the passing vehicle to pass from the rear to the front bumper and applying a mathematical formula.

Smith et al. (2003) also suggest that observing not-at-fault accident rates will provide a representative sample of the driving population for a particular area. Assuming that all people are at the same risk of being in an accident for which they are not at fault, the demographic composition of not-at-fault drivers should reflect the driving population. The problem with using this method of deriving a baseline is similar to others in that it can provide insight into the driving population but not the offending population. Also, as the geographical unit of analysis gets smaller, so does the number of accidents that occur in any one unit. With fewer accidents, there can be less faith that the not-at-fault accidents provide a 'natural' random sample.

One final method employed recently by Riley et al. (2005) and Grogger & Ridgeway (2006), is called the 'veil of darkness.' With this method, stop rates for different racial groups during the day are compared with those made after dark. The underlying assumption is that for an officer to employ racial bias, he/she must be able to see the race of the driver or passenger(s). Therefore, the stop rates in the evening will not be bias driven. This method rests on a number of other assumptions. First, driving patterns and the racial distribution of drivers is the same during the day and after dark. Second, driving behavior by race is the same during the day and the night. Third, exposure to police by race is the same during the day as after dark. Each of these can be controlled for statistically to varying degrees of certainty. Additionally, it is possible that police officers could use vehicle type, condition, or characteristics as a proxy for race.

Much of the discussion thus far has considered establishing a baseline for the decision to stop. Another measure has been used for searches. Some (Ridgeway 2006; Meehan & Ponder 2002; Pickerill et al 2006; Engel & Calnon 2004) use 'hit rates,' or the percentage of searches that lead to the discovery of illegal contraband. If one racial group is searched in 50% of stops but searches only yield a 'hit' 25% of the time and another racial group is searched 10% of the time but searches yield a 'hit' 75% of the time, it is possible that the first racial group is being unfairly targeted.

Conceptions of the Dependent Variable

Racial bias can be employed at various points in a traffic stop. Different studies consider different points at which bias may be present. Generally, racial bias may be present in the decision to stop a motorist, the decision to search a motorist, and in the disposition of the stop (i.e. warning, citation, or arrest). Additionally, racial bias may be present in the decision to use force and in the duration of the stop. In a unique study (Meehan & Ponder 2002), disparate levels of surveillance as indicated by looking a vehicle up on the officer's in-car computer based database was also considered. Additionally, Lundman & Kaufman (2003) consider the perceptions of the driver regarding the legitimacy of the stop and whether the police acted properly. One important difference between different research was the definition of a search. Engel & Calnon (2004) simply considered whether a search was conducted. Ridgeway (2006) on the other hand considered whether the search was a pat, consent, or probable cause search. Pickerill et

al. (2006) distinguished between no search, low discretion searches (when an arrest was made and when a car was impounded) and high discretion searches (pat, consent, and probable cause searches).

RESEARCH FINDINGS

Stops

Race was found to be significant in a number of studies. In a study of traffic stop form data from the San Diego Police Department, Cordner (2002) found that African Americans were 60% more likely to be stopped and that Hispanics were 37% more likely to be stopped. Problems of officer compliance in filling out the stop forms noted above draws into question the findings of this study. Aggravating these concerns, non-compliance was believed to be in minority areas suggesting that the disparity levels may be more dramatic. Cordner did not perform a regression of any kind so spurious relationships cannot be ruled out.

Gaines (2003) examined stop form data from two different police officer groups: traffic officers with the primary mission of enforcing traffic laws and patrol officers who do not focus primarily on traffic law enforcement. Among the traffic police officers, the author found very little variation along racial lines yet he found that African Americans were more than twice as likely as whites to be pulled over by patrol officers. This study highlights the need to examine this issue across organizational contexts.

In their examination of data from the Police-Public Contact Survey, 1999 (conducted by the Justice Department) Lundman & Kaufman (2003) found that African Americans were the most likely to be stopped followed by whites, then Hispanics, and then all "other" races.

Examining survey data from North Carolina, Warren et al. (2006) found that race was a significant predictor of stops by local police but not by Highway patrol officers.

In a multi-method study on racial bias in policing in North Carolina, Smith et al. (2003) found that, based on stop form data, considerable disparity in stop rates existed along racial lines but that 60%-70% of the variation could be predicted by a number of contextual. From survey data (the same used by Warren et al. 2006) the researchers found that African Americans reported more stops than whites, African Americans reported twice as many stops as whites by local police, and African Americans who reported

more risky driving behaviors were more likely to be stopped.

In an examination of stop form data from all Connecticut police departments, Cox et al. (2001) found there was a 5% disparity between percentages of African Americans stopped compared to the percentage of the population that was African American. For Hispanics there was a 4% disparity between the percentage of Hispanics stopped and the percentage of the area that was comprised of Hispanics.

In contrast, a number or researchers have found that race was not a good predictor of stops. When controlling for driver behavior, Lange (2005) found African Americans were not stopped disproportionately to the percentage of the violating population they represented (on the New Jersey Turnpike). Hispanics, however, were still overrepresented among stops. Smith & Petrocelli (2001), in an examination of data from stop forms done by the Richmond, VA police department found race was not a good predictor of stop rates. Additionally, Withrow (2004) found that race was not the best predictor of stops.

Researchers identified other important independent variables in predicting stop rates. One was the driver being younger (Cordner et al. 2002; Lundman & Kaufmann 2003; Warren et al. 2006). Another was the driver being a male (Cordner 2002; Lundman & Kaufmann 2003; Smith et al. 2003; Warren et al. 2006). More stops were made during the late evening/early morning hours (Smith & Petrocelli 2001). Another important independent variable was the driver being a minority in the given area regardless of race (Meehan & Ponder 2002; Withrow 2004; Cox et al. 2001). Driving behavior was also important (Lange 2005; Smith et al. 2003; Warren et al. 2006). Additionally, Lundman & Kaufmann (2003) found whether the driver having had previous contact with the police, a smaller city, and the driver being of a higher socio-economic class to be important independent variables. Smith & Petrocelli (2006) found younger male officers were more likely to stop minorities at a disparate level (but this may have been because younger male officers were deployed to higher crime areas which may have been higher percentage minority). Also, a number of studies found officer race was not important in predicting disparate stop rates.

Searches

In the San Diego stop form study discussed earlier, Cordner (2002) found African Americans and Hispanics were over-represented among all types of searches for

which data were collected (inventory searches of impounded vehicles, incident to arrest searches, 4th degree waver searches which occur when the stopped driver is on probation or parole and the officer can therefore search without consent, and consent searches). While African Americans comprised 10.7% of stops, 16.7% of searches were conducted on them. Hispanics comprised 27.7% of stops and 49.6% of searches.

In his examination of stop form data from the Riverside Police Department, Gaines (2003) found that among stops by patrol officers African Americans (25% of searches) and Hispanics (21.3% of searches) were the most likely be searched followed by whites (17.7% of searches). Gaines cautioned, however, that these figures include inventory searches which were commonly done after illegal activity sufficient to warrant impoundment of the vehicle occurred. Therefore, one cannot discern whether higher search rates among minorities were the result of higher crime rates among minorities for those crimes that resulted in the impoundment of the vehicle or because of police bias. Among the traffic enforcement officers, only 33 vehicles were searched so no generalizations could be made from such a small sample. Gaines (2003) examined "hit rates" (percentage of cases in which illegal contraband is found) for searches as well. Despite being more likely to be searched, African Americans had similar hit rates to whites (8% and 7.9% respectively), and Hispanics were considerably lower (5.4%).

Using stop form data from the Washington State Patrol, Pickerill et al. (2006), distinguished between high discretion searches and low discretion searches. High discretion cases were considered when a K9 unit was requested, consent searches, and "Terry" (i.e. pat down) searches. Low discretion searches were defined as search incident to arrest, inventory search of an impounded vehicle, and a search pursuant to an existing warrant. If racial profiling were prevalent in officers' searching behavior, it would be likely that more minorities were searched in cases in which the officer had more discretion than in cases in which he/she had lower discretion because a search in low discretion cases is fairly standard procedure. While minorities were more likely to be searched, there was little difference in low discretion and high discretion search rates suggesting, the researchers claim, that race was not important in the decision to search. In a multivariate analysis, the authors found that age, gender, and contextual factors were at least as important as race in predicting whether a search would occur.

Investigating national survey data from Police-Public Contact Survey of 1999, Engel & Calnon (2004) found that men, younger drivers, African Americans, Hispanics, and lower and middle income drivers reported being searched more. They also found that those reporting more stops by police were more likely to be searched and those pulled over for reasons other than speeding were more likely to be searched.

In a unique study employing propensity score analysis to stop form data collected by the Oakland Police Department, Ridgeway (2006) found that minority drivers were treated equitably with regard to consent searches. African American drivers were more likely to be pat searched and were twice as likely to be subjected to a probable cause search as non-black drivers.

Citations, Arrests, and the Use of Force

Engel & Calnon (2004) found that men, younger drivers, African Americans, Hispanics, drivers of races other than white, the driver having had fewer previous stops, and driving with fewer passengers to be positively associated with the issuance of a citation. African Americans were 47% more likely than whites to be issued a citation. Hispanics were 82% more likely than whites to be issued a citation. Ridgeway (2006) found that minority drivers were treated equitably with regard to the issuance of a citation.

Males, younger drivers, African Americans, lower and middle class drivers, and cases in which contraband was found were most likely to report being arrested in a study by Engel & Calnon (2004). African Americans were 79% more likely to be arrested than whites (ibid). Those pulled over for reasons other than speeding were more likely to be arrested.

Engel & Calnon (2004) found that men, younger drivers, lower and middle income drivers, and cases in which contraband was found were more likely to have had force used against them. African Americans were 2.1 times more likely to have force used against them than whites. Those pulled over for anything other than speeding were more likely to have had force used against them (ibid).

Perceptions of the Police

Bias in policing is detrimental in a number of ways, one of which is that police-community relations suffer because trust in the police is diminished. This may result in a decreased willingness of the public to seek help from the police or provide assistance in detecting criminal activity. The actual existence of bias is not

necessary for police-community relations to deteriorate. The mere perception of bias may have the same effect.

In an investigation of North Carolina driver survey data, Lundman & Kaufman (2003) reported that African Americans and Hispanics were less likely to have viewed the reason for them being stopped as legitimate. Additionally, both African Americans and Hispanics were less likely to have perceived that the police officer acted properly during the course of the stop.

Duration of the Stop

Ridgeway (2006) found African American drivers were more likely to have had a longer stop.

CONCLUSION

Bias-based policing presents a unique challenge. Not only does bias-based policing degrade the integrity of the subjects of bias, it also has very real, practical implications for police-community relations. Even the mere perception of an unfair police force can deteriorate the police department's ability to fully serve their function to enforce the law. If law enforcement officers are not trusted by the community, some community members may be less likely to seek law enforcement aid in emergencies or collaborate with police officers in investigations.

Studying bias-based policing presents great challenges for researchers as well. Even researchers with tremendous resources have a hard time coming to definite conclusions. All data collection processes used thus far have flaws. No method of establishing a baseline is exact or without problems either in implementation or for purposes of analysis. Even if the data collection and baseline problems could be easily resolved, effectively isolating racial bias as the primary cause of disparate stop rates, stop dispositions, search rates, and rates of the use of force is very difficult.

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