

The Scope of Racial Bias in Policing: Behavioral Science's Role in a Systemic Problem



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There are substantial and persistent racial disparities in policing in the United States. Although disparities do not necessarily indicate discrimination, there is significant evidence that racism, operating in various forms, is a major factor. We adopt a multilevel perspective in our review and analysis of the empirical literature. We consider five levels of processes relating to racial biases in policing and public safety to identify ways of achieving equity. These levels are the nano-level (intrapersonal), the micro-level (interpersonal), the meso-level (organizational), the macro-level (pan-organizational, institutional, or systemic), and the mega-level (cultural, societal, or narrative). We conclude by discussing the theoretical and practical promise of adopting a multilevel perspective and highlighting the pressing need to reconceive policing in the United States to meet the needs of contemporary society.

Keywords: bias, discrimination, disparities, law enforcement, police, race, racism

The mission and limits of policing have been debated since the formal introduction of municipal policing nearly two centuries ago (Rawlings 2002), and those debates are still relevant. Can an armed group of state actors help but become an occupying army? How might abuses of the most vulnerable be prevented? To this end, Robert Peel, the former prime minister of the United Kingdom, allegedly suggested a set of principles that could provide appropriate

constraints, including the principle that the police only hold authority with the consent of the governed (Gash 2011).¹ Yet despite these supposed constraints, police treatment has never been equal across social groups in the United States (Loader 2000). In other words, the question of whether policing can be unbiased has been unresolved since the creation of policing, and there is not sustained evidence in the affirmative. How then should we think about in-

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1. Peel's fifth principle is "The police are the people, and the people are the police." It is worth noting that recent scholarship suggests Peel never wrote these at the time. <https://www.gov.uk/government/publications/policing-by-consent/definition-of-policing-by-consent>.

equity in policing? Is policing a failed experiment? Is it inconsistent with the goal of equity? Or does it simply need long-overdue reforms to realize a vision of equitable public safety?

In this review, we examine these questions in the context of racial and ethnic disparities in policing in the United States. These disparities are systematic differences in the outcomes of law enforcement based on the demographics or social identities of those contacted by police. There is substantial evidence of documented differences in outcomes in policing in the United States related to the race and ethnicity of residents and of the communities assigned to police services. By race we mean a human classification system that is politically constructed but assumed to reflect biological differences to distinguish between groups of people who share phenotypical characteristics or an imagined biological essence. By ethnicity we mean a human classification system meant to connote shared cultural characteristics, histories, and shared fate, but not necessarily reducible to shared biological characteristics.

Racial disparities are not necessarily or exclusively the product of biases or discrimination by police officers. We define bias as a broad term representing inaccurate (usually) negative perceptions, thoughts, feelings, and actions about members of a particular social group. Bias also includes discrimination (sometimes distinguished as discrimination based on belief, preference, or prejudice; Agan 2024; O’Flaherty and Sethi 2019, 2024), which specifically involves unfair behavior, practice, or policies toward members of a social group. It is highly likely that multiple factors contribute to racially disparate outcomes, but there is significant evidence that racially biased officer behavior and racially discriminatory policies and systems that influence officers and residents prior to police contact are significant contributors. In this review, we refer to racism as a set of interwoven systems and behaviors that produce objectionable racial disparities. In the context of policing, racism might manifest as officer attitudes, stereotypes, and behaviors; policing policies that, even if racially neutral, produce systematically negative outcomes based on race; or the accumulation of circumstances that produce racially disparate policing

outcomes. Racial inequities in policing represent disparate outcomes that are caused by discriminatory treatment, by policing practices or policies that unfairly disadvantage members of minoritized racial groups, or by systemic discrimination that creates the conditions for otherwise race-neutral police behaviors to exacerbate objectionable racial disparities (for example, poverty).

In this article, we introduce a multilevel analysis of the literature on race, ethnicity, and policing to provide insight into the complex dynamics of policing and their consequences. We then review evidence of racial and ethnic disparities in policing. Overall, Black people (and members of minoritized ethnic groups) experience more negative contact with police, including experiencing more frequent pedestrian and motorist stops and searches, as well as greater use of force and more likely use of lethal force, than do White people. We then illuminate how biases in policing at each of the five levels within our analytic framework—the nano-, micro-, meso-, macro-, and mega-levels of analysis—produce racially and ethnically inequitable outcomes that contribute to racial and ethnic disparities in policing. We also highlight how the forces at various levels of analyses can operate in complementary ways to determine these inequities. We then propose research and interventions to move toward a fuller understanding of the causes of racial and ethnic disparities in policing and to identify more effective ways to address racial discrimination to help achieve equity in public safety. Critically, these new initiatives would benefit from recognizing confluences among various sources of bias at different levels of analysis and the need for interventions with coordinated impact for reducing bias and discrimination at multiple levels of analysis.

The framework we propose differs from those presented in other articles in this special issue in our particular focus on policing and our more extensive coverage of laboratory research on intrapersonal and interpersonal biases, but our approach is compatible and contributes to a more comprehensive view of racial and ethnic bias in the justice system. Most of the other articles also adopt a multidisciplinary, multilevel perspective tailored to their top-

ics. However, these articles vary in the number of levels considered and the ways the levels are delineated. For instance, Shawn Bushway and colleagues (2025, this issue) distinguish among “taste-based racial discrimination,” which involves individual-level biases (for example, unfair negative attitudes or stereotypes) toward members of a minoritized group; “statistical discrimination,” which does not involve personal animus as a motivator of discrimination and reflects factors that serve as relevant predictors of future behavior (like likelihood of future offense because of influence of violent street gangs in an individual’s neighborhood); and “structural racism,” which can inform the uniform application of laws or systems of resources (for example, access to high-quality legal representation) that produce unfair outcomes across groups. By contrast, we describe five levels of processes situated in different individual-level, institutional-level, or societal-level processes. We view these as complementary rather than competing frameworks. They are designed to offer insights into the dynamics of different facets of the legal system, and understanding the complexity of the influences affecting these elements of the system benefits from analyses reflecting different conceptual and disciplinary perspectives and methodologies.

There are also many similarities between this article and other articles in the special issue. We devote significant attention to intrapersonal and interpersonal psychological processes as contributors to racial inequities in the context of policing, and other articles in the special issue also consider the role of psychological biases with respect to other aspects of the legal system. We also explicitly examine how racial and ethnic inequities in other social systems—for example, in education, labor markets, health care, and housing (see also Lee et al. 2025, this issue)—lead to racial inequities in policing. Moreover, like most of the other articles in this special issue (for example, Wakefield and Turney 2025), we recognize the importance of understanding the history of race and ethnicity in the United States for appreciating the contemporary dynamics racial disparities in the legal system, and specifically in policing. Our similarities in perspective with other articles in this special issue are not surprising

given the interrelationships among processes across the various elements of the criminal legal system and the ripple effects that racially and ethnically discriminatory policing can have for other facets of the justice system (for incarceration rates, see Wakefield and Turney 2025, this issue; for release from prison, see Nahra et al. 2025, this issue) and the role of racially biased policing on other elements of the legal system (Ryo et al. 2025, this issue) and in community impact (Lee et al. 2025, this issue). We thus share the goal, as Sara Wakefield and Kristen Turney (2025) explain, of “broadening the analytical landscape.”

MULTILEVEL ANALYSIS: THE BIOLOGIST, THE BULLY, THE BUREAUCRAT, THE BILLIONAIRE, AND THE GREAT BARD

When we consider levels of sociopolitical organization, it is easy to think in extremes. An interaction between two individuals is clearly micro-level. The global economy is clearly macro-level. But how should we define each level? And what is the utility of those definitions? In this article, we offer a modest proposal for how to distinguish various levels of sociopolitical organization. Because someone’s conflict with another individual is likely caused by different factors than conflict with an institution, and because remedies for interpersonal conflict are likely quite different from remedies for institution-driven harms, it is useful to identify at what level of sociopolitical organization a conflict occurs. In other words, because the ways we suffer from and fight bullies is different from the ways we suffer from and fight bureaucrats, we ought to know our enemies. The purpose of this framing, therefore, is to provide commonsense language for differentiating between levels of sociopolitical organization—to separate the bullies from the bureaucrats.

One way for behavioral scientists to think about these levels is to consider a multilevel statistical model used to predict outcomes. Most behavioral scientists are taught there is great value in specifying, in an analysis of many schools, that each school might exist within a neighborhood. Those neighborhoods exist within a single municipal boundary (such as a

city). And those municipalities exist within a single state. By specifying that schools are nested within these increasingly larger locations, behavioral scientists can more easily disaggregate differences between schools and differences between state education policies. Importantly, not all schools belong to a single neighborhood, draw on students from a single municipality, or are governed by a single state's education policies. Similarly, interactions between state policy and neighborhood culture might be significant drivers in school outcomes for one set of schools and negligible for others. Yet the conceptual framing makes intuitive sense to most who use statistical methods to advance formal tests about school differences.

Conceptually, we argue it is much the same with racism. Table 1 describes the five levels of sociopolitical organization we consider, ranging from the most individual to the most systemic. While recognizing the potential problems of oversimplifying the dynamics underlying racial disparities in policing and acknowledging the complex interrelationships of processes residing at different levels, in table 1 we introduce a representation of multilevel processes that provides the structure for systematizing the extensive multidisciplinary literature for our review of racial disparities in policing, as well as the discrimination that contributes to these disparities, in the United States. The first entry in table 1, the nano-level, is the most individualized level of analysis, but the order is not intended to represent a hierarchy of influences, in the sense that one does

not depend on another; they each can exert independent influences that produce racial disparities that are rooted in discriminatory actions, practices, and policies related to policing.

Social phenomena, when studied from a multilevel perspective, have typically been viewed as operating at three levels: micro, meso, and macro. These levels reflect qualitatively distinct processes. The micro-level of sociopolitical organization involves interactions between individuals or—at most—a small group of people. In the context of racism, the micro-level is best understood as interpersonal discrimination, such as a bigot's behavior. The meso-level of sociopolitical organization relates to how the rules within an institution produce outcomes for individuals or groups. In the context of racism, this level is best understood as institutional or organizational racism, such as when a company refuses to hire individuals who live in majority-Black neighborhoods, artificially depressing job opportunities for Black applicants. The macro-level of sociopolitical organization reflects how the rules across institutions conspire to determine outcomes for individuals or groups. In the context of racism, this level is best understood as structural or systemic racism. An example is how myriad policies and their consequences effectively locked Black families in geographic place—excluding them from opportunities and thrusting additional burdens onto them. Government redlining, for instance, a historical national policy that led to the disproportionate denial of loans to individuals seeking to buy homes in neigh-

Table 1. Levels of Sociopolitical Organization Where Racial Biases May Reside

Level	Description	Personification
Nano	Intrapersonal processes, such as personality, psychophysiological functions, stereotypes, and self-concept	The Biologist
Micro	Interpersonal processes, related to the dynamics of interactions between individuals or small groups of people	The Bully
Meso	Organizational processes associated with policies and practices that produce racially disparate outcomes	The Bureaucrat
Macro	Pan-organizational or institutional processes that determine outcomes for individuals or groups	The Billionaire
Mega	Cultural-level narratives, ideologies, and beliefs that rationalize and/or support existing systems	The Great Bard

Source: Authors' chart.

borhoods where they are not the majority, effectively excluded Black residents of the United States from the historic wealth gains experienced by homeowners of other races during the 1930s through the 1960s. It also prevented Black children from attending better-resourced schools in wealthier school districts, excluded them from neighborhoods with better job opportunities and healthier foods, and locked them into communities with higher rates of street violence. A young family aspiring to create a better life for themselves and their children need not meet with each of these difficulties, but anyone confronting one such hardship is likely to confront several (thus the term systemic).

This analytical perspective gives a tidy summary of the three most common levels of sociopolitical organization and considers them in the context of racism. A bit of reflection, though, suggests two additional levels that are not typically included but are important in both reality and in the study of sociopolitical phenomena, particularly racism. We call these last two the nano-level and the mega-level. Intrapersonal functions reside at the nano-level of sociopolitical organization (for example, personality, psychophysiological functions, stereotypes, self-concept) that tend to predict micro-, meso-, or other higher-order level outcomes. In the context of racism, nano-level processes have received substantial attention within psychological research on social cognition and social neuroscience, two topics that have dominated the psychological study of racism in recent years. One might argue that very little in the study of racism within psychology extends to micro-level analysis of racism; most of it remains at the nano-level.

At the mega-level of sociopolitical organization and analysis, narratives that circulate within and across cultures operate to justify micro-level injustices, as well as inequities at the meso- and macro-levels of organization. In the context of racism, Jim Sidanius and Felicia Pratto (1999) refer to these as hierarchy-enhancing myths and system-justifying ideologies (see also Foels and Pratto 2015; Jost 2020). Essentially, any broadly understood narrative that renders the fact of racial differences good,

moral, natural, or inevitable is what we mean by a mega-level phenomenon. Often these stories are incorrectly conflated with the ways in which systems work together to produce negative outcomes for a group. While a conspiracy of systems surely communicates stories that reinforce these larger narratives, these narratives are also often adjusted, directed, or invented out of whole cloth to suit the purposes of powerful individuals or groups. As such, the stories we tell about our structures and institutions deserve their own category.

Because sociopolitical organization is generally about the exertion of power, we might think of each level as belonging to a different kind of powerful actor. To illustrate, we personify these five levels as the Biologist (nano), the Bully (micro), the Bureaucrat (meso), the Billionaire (macro), and the Great Bard (mega). Each title personifies how power works at particular levels—from individual-level traits as risk factors for outcomes in the world, to an individual treating someone unfairly, to the rule-maker, to the multi-institution-shapers, to the storytellers.

Although the boundaries between levels may not always be sharply delineated, these levels generally involve distinct dynamics and suggest different ways that bias could occur. For each of the five levels, we examine potential contributors to racial bias in policing and then discuss corresponding interventions. We conclude by summarizing key findings, discussing the theoretical and practical promise of adopting a multilevel perspective, considering the need to understand more deeply the reciprocal influences across levels, and highlighting the need to reconceive public safety to meet the needs of contemporary society.

Because of the traditionally central role of Black-White relations in the United States—particularly in the context of state surveillance, control, and violence—we primarily focus on racial disparities in policing that disadvantage Black people relative to White people. We further consider how racism underpins, at least in part, these disparities. Indeed, anti-Black racism has been an influence embedded in much of policing since the origins of policing in the United States. A significant precursor to mod-

ern, professional police forces was slave patrols, which originated in the southern colonies as early as 1704 and spread to all thirteen original American colonies. The objectives of slave patrols were to prevent slave uprisings, ensure that slaves remained on the plantations, and capture runaway slaves. The post-Civil War abolition of slavery ended slave patrols in 1865. However, during Reconstruction, many patrol methods were integrated within Southern police forces and adopted by the Ku Klux Klan. Elizabeth Hinton and DeAnza Cook (2021, 261) further identify “the multifaceted ways in which policymakers and officials at all levels of government have used criminal law, policing, and imprisonment as proxies for exerting social control in predominantly black communities from the colonial era to the present.” Among the legacies of this historical association of racism and policing may be the “long history of discriminatory practices and contemporary proactive policing strategies that are overly aggressive and associated with racial disparities” (Braga et al. 2019, 535).

Although disparities in experiences between White people and Black people, and between White people and other minoritized people, can occur for multiple reasons, discrimination remains a major factor. Racial discrimination in policing not only causes direct harm to non-White people but also has an individual and social impact on vulnerable populations more broadly. These racial disparities are a major reason for the different perceptions Black and White people have of the police. The results of a Pew Research Center Survey (Desilver et al. 2020) reveal that more than 80 percent of Black US residents believe that Black people are treated less fairly by police officers than are White people, and another survey found that 30 percent of Black men in the US reported they have personally been the victim of police violence (Hamel et al. 2020). Black people are also about four times more likely than White people (42 percent versus 11 percent) to report that they are “very afraid” that a police officer will kill them in the next five years (Pickett et al. 2022).

In examining racial disparities in policing and exploring the influence of discrimination

across all five levels, our approach is inherently multidisciplinary. Psychology as a field has traditionally focused somewhat narrowly on intra-personal, nano- and interpersonal, micro-level processes involving how individuals systematically differ on traits that affect their behavior (personality psychology), general processes that shape the ways people think about others (social cognition), and specific types of situations (social psychology) that influence behavior. Psychology has occasionally broadened its aperture to deal with institutional-level phenomena. Systemic-level phenomena have been almost entirely beyond the purview of social psychology, the rare find of cultural psychology is an exception. By contrast, the disciplines of sociology, political science, and economics have placed heavy emphasis on illuminating institutional and structural influences through the lens of social science. Criminology as a field spans all levels of analysis (see, for example, Fyfe 1988). We draw on the literature from all these disciplines in our review and analysis of racial disparities in policing.

RACIAL DISPARITIES IN POLICING

Although researchers generally observe differences in treatment and in policing outcomes between White and non-White group members, the gaps are often starkest between White and Black people. Black people, for instance, experience substantially more contact with police than do White people. Also, the experience of police contact is quite aversive for Black people: in fact, a recent study (Pickett et al. 2022) reports that about half of the Black people who were surveyed preferred to be robbed or burglarized than to have contact with the police.

We next consider why Black people experience police contact as so aversive by examining evidence of racial disparities in various specific policing activities. Then, we consider the longer-term consequences for Black people who experienced police contact, observed it, or subsequently learned about these incidents.

Policing Activities and Incidents

The evidence of racial disparities is robust, with documented differences in outcomes occurring for fatal shootings, other forms of vio-

lence by police officers, and police vehicle and pedestrian stops.

Fatal Shootings and Violence by Police

In the United States, police officers are more likely to use lethal force by firearms against Black people than against White people. An analysis of officer-involved shooting data from 2010 to 2017 indicates that at least 30 percent of Black people shot by the police would not have been shot had they been White (Clark et al. 2023). The rate of fatal shootings of Black people by the police is about two and a half times the rate of fatal shootings of White people (Statista 2024). One in 1,000 Black men and boys will be killed by police over the life course (Edwards et al. 2019). Evidence of these disparities persists when researchers control for a range of relevant factors other than the race of the victim (Goff et al. 2016; Ross 2015; Ross et al. 2021). Among victims of fatal police shootings, Black, compared to White, victims are also less likely to have been armed (Charbonneau et al. 2017; Nix et al. 2017).

Racial disparities in police use of force against unarmed individuals at a nonlethal level also occur (Goff et al. 2016). About a third of Black men report that they have been the victim of police violence (Pickett et al. 2022). A US survey of Black people found that their level of fear about being the target of police violence is five times the level among White people (Graham et al. 2020).

Use of Nonlethal Force

With rare exception, studies investigating racial disparities reveal that police use of force, nonlethal as well as lethal, is significantly more likely in encounters with Black people (and especially Black men) than with White people (Goff et al. 2016; Hollis and Jennings 2018). Police officers are generally more lenient and less likely to use force with White than with Black people (Kovera 2019), even when controlling for the severity of the suspected illegal behavior. An analysis of body-worn camera footage reveals that Black people are 63 percent more likely to experience force in a police encounter than are White people (Willits and Makin 2018). In addition, as both the analysis of the camera

footage and a separate study of case files (Kahn et al. 2017) reveal, Black people are more likely to experience police use of force sooner in the encounter than are White people.

Overall, the effects of the target's race on police use of force typically occur over and above the influence of a range of other factors, including more reported resistance to police officers (Crow and Adrion 2011; Terrill et al. 2008; compare with Paoline et al. 2018) and are observed across the country. Latine people are also targets of police use of force at higher rates than non-Latine White people (Hoekstra and Sloan 2022), particularly with respect to high levels of use of force (such as pointing or using a firearm or taser, or canine; Smith et al. 2023).

The likelihood of police use of force relates not only to the race of the target but also to the neighborhood and cities in which the police encounter occurs. Police officers are more likely to use force in neighborhoods in which non-White people represent a greater percentage of residents (Lee 2016). These effects overlap with the higher use-of-force rates observed in cases of low socioeconomic resources and relatively higher rates of violent crime. In addition, police officers are more likely to engage in use of force in cities with larger percentages of Black and Latine populations, especially when the cities are more residentially segregated (Smith and Holmes 2014).

“Stop and Frisk” Pedestrian Stops and Vehicle Stops

Constitutionally, police officers in the United States can only detain a person if they have reason to believe the person has or is about to commit a crime. However, all fifty states have had some version of stop and frisk laws that permit a police officer to stop and frisk a person without stating a reason. For many of the laws, all that is needed is “reasonable suspicion,” which can mean the person appears suspicious to a police officer.

Stop and frisk laws, as originally proposed, are typically portrayed and frequently seen as a race-neutral way to reduce crime. However, the racial disparities in the actual enforcement of these laws are glaring. Between 2004 and 2012 in New York City, 4.4 million people were

detained under this law. Although the Black and Latine residents of New York City represented slightly over half the city's population, they constituted 83 percent of the people stopped (*New York Times* 2013). Moreover, the likelihood that an investigatory stop by a police officer would escalate to use of force was significantly greater for Black and Latine targets than for White targets (Levchak 2017). Because of successful legal challenges to the stop and frisk policy in New York City, the number of these actions by the police declined dramatically. By 2017, stop and frisk incidents were only a fraction of what they had been earlier, but 90 percent of the people stopped were still Black residents.

With respect to traffic stops, Black and Latine drivers are much more likely to be stopped than are White or Asian drivers (Baumgartner et al. 2017; Lim et al. 2024). The disparity in traffic stops between Black and White drivers was greater in areas in which White residents were more racially biased (Stelter et al. 2022). In addition to where a traffic stop occurs, when a stop occurs is a significant factor relating to this disparity. There is a large racial disparity in traffic stops during the daytime when a driver's race can be easily identified (Pierson et al. 2020); this difference is often reduced at night when it is more difficult to identify the race of a driver (Racial and Identity Profiling Advisory Board 2021). Black drivers are about five times more likely than White drivers (44 percent versus 9 percent) to report that they have been unfairly stopped by the police, and the percentage is almost twice as high for Black men than for Black women (59 percent versus 31 percent; Desilver et al. 2020). Black and Latine drivers are also twice as likely to be searched following a vehicle stop (Pierson et al. 2020). This disparity persists even though police are more likely to find drugs on White than Black targets. Nationwide, while Black drivers are stopped by police and, after they are stopped, searched at a disproportionately higher rate than White drivers, the searches of the vehicles of Black drivers are less likely to discover contraband than those of White drivers (that is, they have a higher "false-alarm rate"; Meyer and Gonzalez 2024).

Extended Consequences of Policing Incidents

Negative contact with police and the nature of the specific incident that occurs in these encounters can have broad and lasting impact not only on those directly involved in the incident but also on members of the broader community associated with the event (for more extensive discussion, see Lee et al. 2025, this issue). Work that tracks the consequences of police contact with residents shows that residents who have more police contact display higher rates of depressive symptoms and psychological distress (Burke et al. 2023; del Toro et al. 2019), higher rates of subsequent criminal activity (del Toro et al. 2019), and worse physical health (Sewell 2017; Sewell and Jefferson 2016). Again, it is not clear what the relationships are between the interactions, individual risk factors, and higher-order shaping of the context. The experience of excessive force and exposure to police violence specifically have immediate and long-term effects on health and well-being. For example, police victimization is associated with psychological distress and depression (DeVylder, Oh, et al. 2017) and with suicide attempts (DeVylder, Frey, et al. 2017).

Particularly in a period of ubiquitous coverage in popular and social media, the impact of fatal shootings and police violence has broad, cascading influences beyond the too-often mortal consequences on the victims (Smith Lee and Robinson 2019). Other contacts with police, particularly if they are invasive and perceived as unjust, have enduring impact not only on those directly targeted but also on other members of the community who observe or subsequently learn about the incidents (Alang et al. 2017).

These broader impacts of policing are elements of the "slow violence" (Ward 2015) that police disproportionately impose on Black people and members of other minoritized racial and ethnic groups. As Rory Kramer and Brianna Remster (2022) explain, slow violence involves harms beyond those associated with law breaking, not only toward individuals suspected of crimes but also toward relevant communities that are "often unseen, by either being mislabeled as unrelated to policing or

unacknowledged because its victims are marginalized people” (44).

Impact of Fatal Shootings and Police Violence

Exposure to police violence through the media can have extended negative consequences, particularly for Black people. A *USA Today*/Ipsos poll (2021) found that in the month after George Floyd’s death, trust in law enforcement declined significantly among US residents in general, to a low of 56 percent. One year later, 69 percent—a significant increase—said they trusted law enforcement. However, the gap between White and Black people was particularly large, 77 percent versus 42 percent. Also, whereas in the month after George Floyd’s death 60 percent of US residents reported that they personally believed that George Floyd was murdered, by the time Derek Chauvin (the Minneapolis police officer who appeared in the viral video of George Floyd’s death) was preparing to stand for trial, that percentage significantly declined to 36 percent. At that later time, the racial divide was substantial: only 28 percent of White people agreed at that time that George Floyd was murdered, compared to 64 percent of Black people. Derek Chauvin was subsequently found guilty of murder.

Police incidents of violence against Black people have an enduring impact on Black communities (Haile et al. 2023). For example, the levels of anxiety and depression among Black people increased substantially following George Floyd’s murder (Fowers and Wan 2020). One study looked at “poor mental health days” among Black people over five years and found that these days were much more likely to occur during weeks when such acts of racial violence received considerable attention in the media. These incidents did not have similar effects on the mental health of White people (Curtis et al. 2021). With respect to physical health, community residents who perceive a greater use of force in their area by police experience higher levels of stress, and this relationship is particularly pronounced for Black residents (Stansfield 2022). Additionally, greater exposure to police killings of Black people adversely affects the cardiovascular health of Black people, increasing the likelihood of stroke for Black men

and hypertension for Black women (Talbert 2023).

In addition, exposure to cases of police violence against unarmed Black men was found to suppress citizen crime reporting among citizens of Cincinnati generally, but particularly among those living in Black and Latine neighborhoods (Pearson and Timberlake 2023), and exposure to police use of fatal force generally suppressed people’s willingness to place 911 calls for assistance in Los Angeles, but that impact was greater in Black and even greater in Latine neighborhoods; the effect was significant in White neighborhoods as well, but the impact occurred to a lesser degree (Sheppard and Stowell 2022).

Impact of Pedestrian and Vehicle and Stops on Community Health and Action

Common encounters between police officers and community members can also have significant negative effects on the health and actions of the residents of areas in which police officers are “protecting and serving.” For instance, adolescents who were personally stopped by police officers (on the street, in a car, at school) or who observed another person stopped by police subsequently experienced more depressive symptoms, and this effect was particularly pronounced for Black adolescents (Turney 2021; see also Burke et al. 2023).

The character of police contacts is a critical element of how people respond to police officers. While the number of stops in an area does not directly relate to negative health among residents, the incidence of stops culminating in invasive action by police (for example, frisking) does relate to poorer health (for example, ratings of overall health and specific conditions such as high blood pressure; Sewell and Jefferson 2016). These effects, particularly those associated with high levels of stress and psychological distress, occur not only for individuals who have personal contact with police but also for those who reside in highly and inequitably policed areas. The negative effects are particularly strong for Black and Latine individuals. In addition, residents living in minority communities with higher incidences of use of force against pedestrians have a higher risk of diabetes and obesity (Sewell 2017).

The greater stress aroused by encounters with law enforcement, such as police stops and arrests, has an additional consequence: adolescents who experience police contact show an increased likelihood of subsequently engaging in delinquent behavior. In a four-wave longitudinal study, contact with law enforcement in the form of pedestrian stops by police predicted increases in Black and Latine adolescents self-reported criminal behaviors across an eighteen-month period, in part because of the psychological distress (for example, anxiety and depression) these adolescents experienced (del Toro et al. 2019).

In terms of the impact on the community, while a greater number of stop and frisk encounters in disadvantaged communities was generally positively related to more calls for service (311 calls) in those neighborhoods, more stop and frisk encounters that involved searches or the use of force, particularly when they did not result in an arrest, reduced the likelihood that community members would seek these services (Lerman and Weaver 2020). In general, involuntary encounters with police reduce willingness to engage with or seek support from police or local government (Brayne 2014). In areas around Philadelphia, greater incidence of pedestrian stops in which police frisked residents predicted lower use of emergency health services (Kerrison and Sewell 2020). As Vesla Weaver, Gwen Prowse, and Spencer Piston (2020, 3) explain, “This is because people tend to engage the state only when they have a basic trust that it will not dominate them, humiliate them, or physically assault them.”

Furthermore, this response is not necessarily one of passive withdrawal; it also often involves “collective autonomy,” in which communities distance themselves strategically from public institutions (for example, police and government) while building community resources to promote racial collective consciousness and self-determination. An analysis by Weaver and colleagues (2020) of conversations between Black residents from highly policed areas in five US cities reveals consistent themes of perceptions of police oppression and consequent efforts to withdraw from engagement with police and government while

developing community cohesiveness, autonomy, and power.

In summary, there is robust evidence of racial and ethnic disparities in policing in the United States. This disparate treatment of Black residents relative to White residents has significant lasting impact on Black people, both individuals who experience direct police contact and those who learn about incidents involving others. Beyond the impact of these events in terms of psychological distress and its consequences for mental and physical health, these occurrences undermine trust in the police, which reduces the likelihood that residents of affected communities will seek police assistance or use other government services, such as emergency medical services.

As noted earlier, racial disparities in policing-related outcomes do not automatically imply racial discrimination. In subsequent sections, we explore the potential role of racial discrimination in policing and how it contributes to racial disparities. The challenge of distinguishing the role of discrimination relative to other potential influences in these disparities is a complex task because of methodological challenges in determining causality, the fact that discriminatory influences operate in different sociopolitical levels, and the very different nature of the activities in which disparities are observed. Bias has many facets, and the circumstances and motivations involved in different police activities (such as use of force and traffic stops) vary widely. The actions of police officers are also shaped by influences at multiple levels of analysis including, for example, officer biases, situational officer discretion, and organizational or institutional guidance (Camp 2024). While acknowledging these complexities, we attempt to triangulate from the diverse evidence to better understand the potential role of racism in racial disparities in policing.

NANO-LEVEL PROCESSES AND BIAS IN POLICING

We personify the nano-level of sociopolitical organization (which involves intrapersonal processes) as the Biologist because it is the most molecular level of analysis within our framework. This level of processes includes brain

structures and functions that shape the social-cognitive processes that influence the ways people think about their social world and respond to it. As we previously noted, much intergroup-relations research in behavioral science, and most of it in psychology, focuses on *intrapersonal* biases as risk factors located within the nano-level for discriminatory behavior (Swencionis and Goff 2017). This includes most of the research in psychology on prejudice (Dovidio 2001), implicit attitudes (Banaji and Heiphetz 2010), stereotyping (Eberhardt et al. 2004), and stereotype threat (Goff et al. 2008). Sometimes referred to as identity traps (Goff 2016), in the context of psychological research, these individual risk factors for discriminatory behavior are often not tested in ecologically robust settings, and the magnitude of their effects in dyadic or small-group contexts under naturalistic conditions is not firmly established. However, a significant literature inside and outside psychology implicates these internal, nano-level risk factors for discriminatory treatment of members of minoritized groups in policing. We review these processes and their relevance to policing next.

Intrapersonal Influences

In this section, we examine how prejudice, stereotypes, and threat may contribute to discriminatory treatment that underlies racial inequities in policing and to racial disparities in policing. Prejudice is a negative attitude toward a group and its members; stereotypes are associations and beliefs relating to the characteristics of a group and its members. Both prejudice and stereotypes can be either explicit or implicit. Explicit prejudice and stereotypes are attitudes and beliefs about a group and its members that individuals know they hold and are willing to express. By contrast, implicit prejudice and stereotypes are activated largely automatically, without intention and frequently without awareness. Implicit biases are assessed through performance on a task that does not appear to be related to prejudice or stereotypes, such as the Implicit Association Test (IAT; Greenwald, Brendl et al. 2022). Threat, which mobilizes fight-or-flight responses, is a negative emotional state aroused by concerns that individuals or a group will cause physical or other

harm to themselves or to members of the group (Vogel and Messner 2024). These processes have received the most empirical attention in psychology, and this research on racial bias in policing has approached the issue in two different ways, as stable individual differences producing cross-situationally consistent behaviors, and as orientations that are moderated by situations in shaping behavior.

Individual Differences

There is evidence of stable individual differences across time in officers' orientations in policing. For instance, one robust predictor of police officers' attitudes toward use of force on the job is their attitudes two years earlier, before they entered the police academy (Oberfield 2012). Building on the idea that police officers differ systematically in the ways they approach policing, one line of research on racial disparities in policing that involves discrimination by police officers has focused on the role of "bad apples," or a limited number of officers whose bias skews the statistics for unjustified disparate outcomes. Indeed, there is evidence of consistent individual differences among officers in racially biased treatment of residents and others in the community (Terrill and Ingram 2016). Felipe Goncalves and Steven Mello (2021) show that the racial disparity in speeding ticket outcomes among Florida Highway Patrol officers can be accounted for by the actions of less than half (about 40 percent) of patrol officers. Allegations by Chicago residents of police misconduct were significant predictors of future allegations against those same officers (Rozema and Schanzenbach 2019), providing additional evidence of stable individual tendencies. However, a simulation found that replacing the top 10 percent of Chicago officers identified as at risk for engaging in misconduct in their duties with ones not at such risk would reduce the overall number of use-of-force incidents by only 4–6 percent across a ten-year period (Chalfin and Kaplan 2021).

Research identifies a specific individual-difference characteristic that has important consequences for policing with respect to discriminatory treatment of members of particular racial and ethnic groups. Policing, as it has been traditionally conceived in the United

States, functions to enforce the existing hierarchical social order. Law enforcement as a profession thus appeals to individuals who value this orientation: policing attracts people who have characteristics (for example, in ideology or personality) that relate to support for maintaining the current social order. Social Dominance Orientation (SDO) is an individual-difference measure that reflects the extent to which a person prefers hierarchical intergroup relations over equality and desires their in-group to dominate outgroups (Ho et al. 2015; Sidanius et al. 2017). Although the SDO scale does not identify specific other groups in its items (for example, “Some groups are just more worthy than other groups”), it predicts biases toward multiple marginalized groups, including Black people. People who score higher in SDO are generally more prejudiced in their attitudes, hold more negative stereotypes of other groups, and behave in more discriminatory ways toward traditionally marginalized social groups (Duckitt and Sibley 2017).

SDO is particularly relevant to policing. White police officers score higher on SDO compared with members of the general public, college students, and public defenders, even controlling for a range of demographic characteristics (Sidanius et al. 1994; see also data provided by Xu et al. 2014). This orientation is further supported by officer experiences while serving. Junior police officers’ perceptions of a high level of SDO among peer officers reinforces their own orientation (Gatto and Damburn 2012). Also, specific prejudices toward a range of groups increase with training and experience in policing (Gatto et al. 2010). With respect to policing outcomes, Jillian Swencionis, Enrique Pouget, and Phillip Atiba Goff (2021) demonstrate across three different cities that White officers (but not Black officers) with higher levels of SDO have a greater number of use-of-force incidents during “Terry” stops (forcible stops made when an officer suspects a crime). This set of studies, however, does not include data to test whether the use of force is more frequent with Black than with White targets. Overall, the findings about the role of individual differences indicate that “bad apple” police officers do exist and that their discriminatory actions can contribute disproportion-

ately to racial disparities in policing. However, this factor accounts for only a limited amount of variance in racial disparities in policing.

Prejudice and Stereotypes

There is converging evidence of the role of racial prejudice (an attitude or unfair preference) and stereotyping (overgeneralized and frequently inaccurate beliefs) in policing across a range of research paradigms. Analysis of policing statistics implicates the influences of racial prejudice and stereotyping on a range of police activities and outcomes. Economists Brendan O’Flaherty and Rajiv Sethi (2019, 2024) examine the extent to which racial disparities in police stops and searches and police use of deadly force reflect statistically accurate beliefs that justify these disparities (called statistical or strategic discrimination) or represent unjustified, biased attitudes or beliefs based on race (termed preference-, prejudice-, or belief-based discrimination). This distinction is a critical one in the field of economics, determining the sources of racial disparities in policing (Agan 2024). These researchers conclude that while statistical discrimination does contribute to racial disparities in stops and searches, prejudiced discrimination also exerts a significant effect (for example, Goel et al. 2016; Pierson et al. 2020). In making such determinations of disparities as due to unfair discrimination, appropriate benchmarks are critical. Hit rate analysis, which is a widely accepted benchmark (Agan 2024), compares incidences of stops to the finding of contraband in the searches that follow. Unfair discrimination when the frequency of stops is based on race (for example, Black motorists versus White motorists) significantly exceeds the relative hit rates (for example, finding contraband in searches).

O’Flaherty and Sethi (2024) report that compared with their representation in the population, Black people were significantly overrepresented in fatal police shootings from 2015 to 2022. However, the researchers note that incidences of fatal shootings of Black people by police officers were comparable to the incidence of Black people arrested during that period. While this analysis suggests that racial disparities in fatal shootings may primarily reflect statistical discrimination, O’Flaherty and Sethi

further observe that using arrestees as the baseline may obscure the impact of prejudiced discrimination to the extent that arrest rates are themselves a product, at least to some degree, of prejudiced discrimination. The researchers also note that stereotypes Black people hold of police officers may also contribute to their encounters with police, which can escalate into use-of-force incidents and potentially to fatal shootings (see also Agan 2024).

Psychological research has focused on understanding relevant aspects of racial prejudice and stereotypes and how those biases can influence police behavior. That is, this type of research has a strong emphasis on illuminating intrapersonal and interpersonal mechanisms. Goff and colleagues (2008) focus their research on a critical dehumanizing element of stereotypes of Black people: the tendency among White participants in their experiments to automatically associate Black people with gorillas or other kinds of apes. In a series of studies conducted with general samples of participants, these researchers further illuminate the implications of this bias within criminal justice contexts. Specifically, the research demonstrates how this association of Black people with apes alters visual perception and attention and increases endorsement of violence against Black targets. One of their studies, involving analysis of criminal cases, reveals that news articles written about Black people who are convicted of capital crimes are more likely to contain ape-relevant language than news articles written about White convicts. In addition, convicts who are implicitly portrayed as more ape-like in these news articles are more likely to be executed by the state than those who are not. These researchers directly demonstrate the causal impact of this form of dehumanization in the domain of policing. They subliminally primed White male participants with words related to *ape* or *big cat* and then had participants view a video of a Black or White target being beaten by police officers. Participants exposed to the ape-related words were more likely to believe the police officers' violent actions were justified when the victim of the beating was a Black person but not when the victim was a White person.

While this set of studies did not examine the

stereotypes of police officers directly, the researchers report anecdotal evidence. In Los Angeles, police officers referred to the beating of Black targets as “monkey slapping time” and described a Black family they had to visit as “gorillas in the mist.” It was also common among Los Angeles police to report incidents in which a Black person died as “NHI”—no humans involved (Goff et al. 2008). More recently, an analysis of text messages sent between police officers in Berkeley, California, in 2019 and 2020 finds that these officers “engage in vile dehumanization of (Black people) and express views that are openly racist” (Savidge et al. 2022).

Another core aspect of automatically activated (implicit) racial stereotypes directly relevant to policing is the prevalent stereotypic association of Black people with criminality (Pickett et al. 2014). For instance, one set of experiments (Eberhardt et al. 2004) demonstrates that participants more quickly identify obscured photos of crime-related objects (such as guns) after being subliminally primed with Black than with White faces. The speed with which the crime-related objects are recognized is unrelated to participants' level of explicit racial prejudice, suggesting the distinct nature of implicit and explicit biases. Another prominent research paradigm examines race-related bias toward identifying guns (compared with non-gun objects) following brief exposure to Black faces compared with White faces (see Payne and Correll 2020 for a review). Research using this paradigm has consistently shown that participants are more likely to mistakenly identify objects as guns when the objects are paired with images of Black men's faces than when they are paired with images of White men's faces. This effect does not occur at the earliest stages of perceptual recognition of the objects but develops at later stages in ways that suggest racial stereotypes shape how people construe and react to the objects (Stein et al. 2023).

Researchers studying discrimination in policing have often focused on simulations of decisions to shoot armed or unarmed targets, most commonly male targets. In one of the most widely used paradigms, participants engage in a “shoot/don't shoot” computer simulation in which they observe images of White and

Black men in everyday places like parks or city sidewalks (Payne and Correll 2020). Some of the men are armed with guns, while others are unarmed and carrying mundane objects like wallets or cell phones. Participants are instructed to press a button to “shoot” if the man is holding a gun or another button to “don’t shoot” if the man is not holding a gun. In this simulation, participants unaffiliated with law enforcement tend to mistakenly shoot unarmed Black men at higher rates than unarmed White men. These participants also tend to react faster to unarmed Black men than unarmed White men (see Mekawi and Bresin 2015 for a review; compare with James et al. 2016).

Follow-up research on the intersection between race and gender has shown that Black women are not more likely to be mistakenly shot than White women or White men in these simulations, suggesting that Black men are uniquely associated with violence and danger (Plant et al. 2011). The racial bias does not relate to an explicit measure of racial prejudice (Correll et al. 2002, Study 3), but it is greater among participants sampled generally (Correll et al. 2006) and police officers (Peruche and Plant 2006) who more strongly endorse the stereotype of Black people as “dangerous” or as criminals. In studies employing both White and Black participants unaffiliated with law enforcement (Correll et al. 2002, Study 4) and police officers (Plant et al. 2005), the level of shooter bias against Black targets is comparable across participant race, suggesting that shooter bias is perpetuated by knowledge of cultural stereotypes rather than by an explicit propensity to discriminate against Black people. Experimental interventions that weaken the stereotypic association of race and criminality, in turn, reduced racially discriminatory responses on a shoot/don’t shoot task (Plant et al. 2005).

Compared to the results of studies using participants sampled from general populations, results of research using police officer participants in decisions to shoot in this simulation paradigm are more variable. Some research has shown that, at least under some circumstances, police officers are more hesitant to shoot Black targets than White targets on a shoot/don’t shoot task (James et al. 2017). Also,

police officers’ implicit bias, as assessed using the IAT, does not reliably predict racial biases in decisions to shoot in this task (Andersen et al. 2023). However, racial biases in these types of simulated encounters are well documented and depend on the life experiences of the police officers. On average, officers with policing experience do not tend to show a racial bias in decisions to shoot (Correll et al. 2007). However, officers who have less childhood contact with Black people or are assigned to gang and street-crime units that regularly deal with minority gang members tend to show higher levels of racial shooting bias (Sadler et al. 2012; Sim et al. 2013). New police recruits also tend to show evidence of a racial shooting bias, suggesting that certain on-the-job experiences may be important for mitigating racial shooting biases (Ma et al. 2013).

Because the likelihood of activating a stereotype of a group is greater when people are exposed to a more typical member of a group, implicit stereotyping is stronger when people are exposed to a Black individual who is more visually prototypical of their race. Of direct relevance to criminal justice, an analysis by Jennifer Eberhardt and colleagues (2006) demonstrates that when Black defendants found guilty of a capital crime involving a White victim are perceived to have a more stereotypically Black appearance, they are more likely to be sentenced to death (see Kleider-Offutt et al. 2017 for a review). Laboratory research employing the shoot/don’t shoot simulation paradigm (Kahn and Davies 2011) demonstrates that both White and Black participants who are not employed in law enforcement exhibit a greater propensity to shoot more phenotypically stereotypic Black targets (those with darker skin, broader noses, and fuller lips), resulting in a more pronounced racial shooting bias. Phenotypic stereotypicality of White targets also matters. A further analysis of a random sample of booking photos reveals that, controlling for type of arrest, reported level of resistance, and the presence of drugs and alcohol in a target’s system, White targets who are perceived to be more phenotypically White are less likely to be the targets of police use of force and are treated with less force by police (Kahn et al. 2016). However, this study does not find a significant rela-

tionship between the phenotypic stereotypicality of Black targets and police use of force.

Threat

Threat is highly salient in police work (Jamieson et al. 2000) and takes many forms. It often involves a general concern about personal safety, which leads police officers to be highly suspicious and preoccupied with maintaining an edge in police-resident exchanges, particularly in those involving Black targets. For instance, Joscha Legewie (2016) finds that police use of force during stops of Black (but not White) pedestrians significantly increased during the two weeks immediately after two officers were killed by Black targets.

Police may thus develop an “us versus them” orientation toward residents. In general, an orientation of this type makes people concerned about the motives of outgroup members, wary of their actions, and more defensive in interactions with them. In policing, it can often lead to an animosity toward community members generally, but this antipathy may be particularly pronounced toward Black people. Exposure to Black people spontaneously arouses threat, even among Black participants who do not harbor prejudice—either explicit or implicit—against Black people (March 2023).

This threat may be generated through elements of the cultural racial stereotype of Black people. For instance, White people, particularly those higher in implicit racial bias, tend to perceive even neutral facial expressions of Black persons as expressing anger (Hugenberg and Bodenhausen 2003). Other research, using a representative sample of White participants, shows that priming people with the race of a seventeen-year-old male juvenile offender who committed a violent assault affects the level of punishment that they recommend: the juvenile offender is viewed as more blameworthy and more deserving of a sentence of life in prison when he is Black than when he is White (Rattan et al. 2012). These effects are likely attributable to a greater cultural association of Black people with violence. Consistent with this reasoning, when individuals are primed with words associated with Black people, they are more likely to perceive another person’s actions as hostile, even where the person’s race is not known

(Devine 1989). Additional research that extends this work to policing shows that when police officers and juvenile probation officers are subliminally exposed to words related to the Black cultural stereotype (compared to words that were unrelated to racial stereotypes), the officers view a juvenile offender who either shoplifted or assaulted a peer as more hostile and culpable, even though the race of the offender is not directly identified (Graham and Lowery 2004).

The activation of racial stereotypes can additionally affect perceptions of Black juveniles in a particular way that arouses threat, also with direct relevance to policing. Goff and colleagues (2014) conducted a series of studies in which both undergraduate students and police officers judged the age and culpability of youths between ten and seventeen years of age in a criminal justice context. While both undergraduates and police officers estimated the ages of White youths accurately, they perceived Black individuals suspected of committing a misdemeanor as over two years older than they were. Black individuals suspected of committing a felony were seen as more than four years older. Perceptions of the culpability of the youths for the crime showed a similar pattern. These findings suggest that the force typically used by police for adults may be viewed as appropriate for Black youths. Other research reveals that people who see young Black men as threatening are more likely to also perceive their bodies as taller and heavier than comparable young White men of the same height and weight (Wilson et al. 2017). Overall, these results pertaining to race and threat may partially explain why police are more likely to use force with Black than with White targets.

Another form of threat—stereotype (or identity) threat—also contributes to racial bias in policing (Pryor et al. 2020; also see Swencionis and Goff 2017 and Burke 2023). Stereotype threat occurs when a person is in a situation that arouses concern about being judged in accordance with unfavorable stereotypes associated with a social identity that is important and relevant to the context (Steele 2011). Marie Pryor and colleagues (2020) explain how a White officer may experience stereotype threat with respect to being judged in accordance

with a stereotype that White people are racist. Also, a police officer of any race or gender may be concerned that members of the community will stereotype police officers as racist. Research conducted in the southwestern United States finds that both officers and participants unaffiliated with law enforcement feel less positively toward law enforcement when faced with the prospect of enforcing what they feel would be seen as racist, and officers fear for their safety as a result (Epstein and Goff 2011).

In encounters with police, citizens also experience threat (Olivett and March 2023). Because of this experience of threat, they display both greater physiological reactivity and defensive behavioral responses (such as a defensive freeze reaction) in encounters with police officers than with other people. Black people, because of the high level of police surveillance they experience, the threat of physical and psychological abuse by police officers, and the quantity of negative police encounters they have had, are especially apprehensive and defensive (Algrim et al. 2022; see also Henning 2021).

Moreover, like police officers in their interactions with the community, community members experience stereotype threat in these encounters. One study shows that Black people, but not White people, report concern that police officers stereotype them as criminals because of their race (Najdowski et al. 2015). Black men but not White men report they would experience stereotype threat in encounters with police and anticipated anxiety, self-regulatory efforts, and behaviors that are commonly viewed as suspicious by police officers.

Contextual Moderators

Situational factors that heighten the risk of discriminatory police behavior include cognitive demand, salience of crime, officer inexperience, and officer discretion (Swencionis and Goff 2017; Pryor et al. 2020; and Glaser 2024). These risk factors for discriminatory policing reflect the hypothesized influences of implicit prejudice and stereotyping on behavior that have been identified in basic psychological research.

The literature on cognitive demand and racial bias reveals that when the demands of a

situation exceed the processing resources available, the resources that are typically devoted to controlling the expression of racial bias (which tend to be quite effortful) are otherwise occupied and fail to suppress racial biases that are automatically activated (such as implicit biases). Faced with cognitive overload, most people, including police officers, will resort to cognitive shortcuts, such as using the racial stereotypes that associate Black people with crime (Swencionis and Goff 2017).

Police officers have multiple, simultaneous demands on their attention and cognitive processing, and “they have to make life-altering decisions under severe time constraints, often under stressful or dangerous conditions” (Pryor et al. 2020, 350). Moreover, interracial contact can itself act as an additional stressor, especially for individuals, particularly those who score high on measures of implicit bias (Trawalter et al. 2009). This stress can have detrimental effects on subsequent performance (Richeson and Shelton 2003): following interracial interactions, White participants—particularly those who scored higher in implicit racial bias—display impaired performance on subsequent tasks requiring cognitive effort to inhibit inappropriate responses.

Aligning with basic research on prejudice and stereotypes, situational influences systematically moderate the impact of implicit biases on actions relevant to policing. For instance, conditions that interfere with conscious control of behavior both increase the level of police officers’ level of implicit bias and exacerbate the impact of implicit racial biases on behavior. Police officers show higher implicit prejudice, as assessed by the IAT, following nights in which they have less sleep (James 2018), and officers who feel tired (rather than alert) exhibit stronger racial bias in decisions to shoot (Ma et al. 2013).

Time pressure similarly places demands on people’s cognitive resources, increasing the likelihood that racial biases, particularly implicit ones, will be expressed and critically shape behavior. As discussed earlier, White participants typically identify guns faster when they accompany Black (as opposed to White) men’s faces, but time pressure intensifies these effects. When given a short response deadline,

participants are significantly more likely to mistake a tool for a gun when it is paired with a Black man's face. In other words, when participants are faced with a split-second decision, race influences their tendency to perceive a gun that is not actually there (Payne and Correll 2020). The racial biases observed in the shoot/don't shoot paradigm are even greater when participants must make their decision more quickly (Correll et al. 2002).

As discussed earlier, cultural stereotypes associate Black people, and particularly Black men, with criminal activity. A criminal focus, in turn, exacerbates racial biases and their impact. Crime is chronically salient in much of police work and, in addition to concerns about personal safety, other aspects of policing emphasize criminality as a core issue in policing. Police performance is often assessed in terms of its effects on crime rates, which tends to incentivize a focus on crime to the exclusion of other aspects of policing, such as protecting the public safety, providing service to the public, having positive interactions with community members, or being accurate (Swencionis and Goff 2017). This focus on crime control represents a risk factor for discrimination because it heightens the accessibility of pervasive stereotypes associating Black people (in general) and Black men (in particular) with crime-related concepts (Eberhardt et al. 2004). Chronic and transitory factors that make crime salient are likely to increase racially disparate behavior by police officers that harms Black people. For example, when police officers are placed in situations where crime is emphasized, they attend more quickly to faces of Black men than of White men and are more likely to falsely identify Black men in lineups (Eberhardt et al. 2004).

The context of gangs further illustrates this point. Between 11 percent and 27 percent of self-identified gang members are estimated to be White, and White gang members' level of criminal activity is equal to those of their non-White counterparts. However, there is a strong stereotypic association of gang membership with Latine and especially Black youths and adolescents. One likely consequence of this stereotype is that police officers will attend more to Black and Latine people in their activities

relevant to gangs. For example, in Chicago, police officers recorded more than 128,000 adults and 33,000 children and youths in a database of gang members and "gang-affiliated" persons (Sweeney and Fry 2018). Non-White individuals were vastly overrepresented in these databases, with over 95 percent of the entries for adults identified as Black or Latine. These racial and ethnic disparities in the "gang" listings, which likely were rooted in racial biases, had disproportionate negative consequences for Black and Latine people: the database was used for criminal investigations, background checks, immigration enforcement, and criminal sentencing (Dumke 2018).

Inexperience is associated with uncertainty and has a more limited set of policing skills that may normally be acquired over time. Perhaps as a consequence, more inexperienced police officers are generally more inclined to use force in their policing. Younger officers and officers with fewer than five years' experience use more force and are 2.5 times more likely to be investigated for use of force (McElvain and Kposowa 2004; Terrill and Mastrofski 2002). Officers who are twenty-five years old or younger are over three times more likely to be investigated for use of force compared with officers over the age of forty (McElvain and Kposowa 2004).

While the greater tendency to use force, often with insufficient justification, in itself may increase the likelihood of racial disparities in policing, racial stereotypes further increase the likelihood through discriminatory actions. Stereotypes influence behavior more strongly under conditions of uncertainty. Thus, officers who are new to police service or who receive a new assignment are likely to be particularly susceptible to the racialized errors that can arise from uncertainties and consequent reliance on limited cues—such as community members' race, gender, or presence in a high-crime neighborhood—to determine whether to suspect a person of breaking the law (Willis et al. 2010). Also, because of the role of seniority in police assignments, newer officers are more likely to be assigned to rotating or night shifts, which produce sleep disturbances that (as discussed earlier) independently increase the likelihood of racially discriminatory behavior.

The literature on skill acquisition and expertise concludes that individuals with more practice are more likely to perform tasks accurately and are less likely to engage in racial discrimination (see, for example, Kawakami et al. 2005; Plant and Peruche 2005). Thus, people with less training and experience are not only less successful in performing tasks but also more susceptible to racial biases affecting their responses. With respect to policing, practice can increase accuracy in weapon identification tasks and reduce racial biases in shoot/don't shoot tasks. Simulations that more closely mirror real-world deadly force encounters, which provide more detailed information about the situation and the target, generally show less racial bias in decisions to shoot (Andersen et al. 2023; Cox et al. 2014; James et al. 2013). In general, likely because of their greater training in firearm use and procedures for use of force, police officers are still less likely than community members to make these racialized errors on shooting tasks (Correll et al. 2007). Also, in support of the proposed roles of experience, training, and expertise, community members who receive training and practice in the shooter task demonstrate improved accuracy and diminished behavioral effects of racial bias (Correll et al. 2007; Plant et al. 2005; Sim et al. 2013). Even among police officers, practice with the simulated shooting task reduces racialized errors against Black targets (Plant and Peruche 2005).

As basic research has shown, ambiguity is an important factor in the extent to which personal biases are manifested in discriminatory behavior. When decisions or actions are governed by clear-cut rules or strong norms, a person is more likely to behave in a racially unbiased manner. However, when rules are nonexistent, appropriate behavior is not well defined, or norms are ambiguous, White people, including White police officers, are more likely to act in ways that favor White persons and disadvantage non-White individuals. Ambiguity and personal discretion are particularly relevant factors in policing. In their day-to-day work, police officers must contend with high degrees of ambiguity (such as determining who fits a suspect description or who poses a potential threat) and have high discretion (for exam-

ple, deciding whether to search during a traffic stop). Police officers necessarily exercise a great deal of discretion in the course of their work: they must continually make judgments about the meaning of others' behavior and about how to weigh facts, circumstances, and evidence. In the absence of binding directives or established protocols, officers' reliance on discretion or personal judgment can allow their prejudices to influence their decisions.

Furthermore, officers' discretionary exercise of their powers to stop, search, and use force against community members is not meaningfully constrained by the courts. The discretion allowed under stop and frisk laws and in traffic stops is thus a primary reason Black and Latine people are disproportionately targeted by police in these activities (Desilver et al. 2020). Consistent with this proposition, policing records show evidence of biased discretion during traffic stops and police interactions in California. Officers choose to search individuals perceived to be Black at over twice the rates of individuals perceived to be White. However, the probability of finding contraband during the search (the discovery rate) is higher for individuals perceived to be White (Racial and Identity Profiling Advisory Board 2021), indicating evidence of racial discrimination. Although the introduction of body-worn cameras (as we will discuss in more detail) and the ubiquity of cell phone recordings of police encounters may expose officers' behavior to increased public scrutiny, it is not clear that the availability of video recordings has systematically increased accountability for police misconduct.

Nano-Level Interventions

From an individual-level perspective, interventions to combat racial biases that form a foundation for discrimination in policing need to target intrapersonal influences, such as the activation of implicit biases (for example, stereotypes and prejudice), and the application of explicit biases that shape the interpersonal behaviors of police officers in encounters with targets. We consider three types of interventions that could potentially reduce discriminatory behavior by individual police officers through selection procedures, antibias train-

ing, or training that more specifically targets particular aspects of policing.

Screening and Selection

One approach for reducing racial discrimination in policing is to reduce the likelihood that individuals who have biases enter the policing profession. Reflecting this direction, California Assembly Bill 846, which became effective in 2021, requires that candidates for a position as a “peace officer” be screened in the hiring processes in ways to help ensure that they are “free from any physical, emotional, or mental condition, including bias against race or ethnicity, gender, nationality, religion, disability, or sexual orientation, that might adversely affect the exercise of the powers of a peace officer.” These screening assessments could include measures of candidate racial or ethnic bias. As noted earlier, individuals higher in SDO, which relates to greater prejudice against a range of minoritized groups, are particularly attracted to policing as a profession; police officers, on average, tend to score high in SDO compared to the general public (Sidanius et al. 1994; Xu et al. 2014); and police officers higher in SDO are more likely to use force against targets (Swencionis et al. 2021). However, current measures of explicit prejudice and stereotyping are not well suited to screening for bias because individuals tend to adjust their responses to appear less biased than they are when that is socially desirable. Implicit measures of bias are less amenable to such strategic control and relate significantly to discriminatory behaviors on average (Kurdi et al. 2019), but they do not have sufficient predictive strength for any specific individual to justify use of such measures for employment screening (Greenwald, Dasgupta et al. 2022; Lai and Wilson 2021). An alternative approach is to screen for other individual differences that promote positive relations with members of minoritized groups or that tend to mitigate the potential effects of automatically activated (implicit) bias. These can include high levels of empathy and perspective taking, which attenuate the impact of implicit bias (Todd et al. 2011), or general personality traits associated with more positive behaviors toward people from diverse groups (for example, Agreeableness; see Crawford and Brandt 2019).

Background investigations in screening procedures can also be used for prior candidate activities that would be useful in predicting, in combination with other materials in the review process, the likelihood that an individual would perform their policing duties without bias. Engaging more frequently in positive contact and having close relationships with members of another racial or ethnic group are among the most robust predictors of less bias against minoritized groups, which is supportive of research on contact theory (Pettigrew and Tropp 2013). People who have had more positive intergroup contact with members of another racial or ethnic group or who have a friend who is a member of that group have lower levels of prejudice against the group and other members of the group, and they experience less threat when they encounter members of the group. Conversely, those who have more negative experiences with members of another group are more biased against the group and feel greater anxiety and threat (Paolini et al. 2021). These latter findings suggest a possible reason why, given the generally negative experience of interracial police-resident encounters, police officers with greater prior contact with Black people displayed greater racial bias against Black people in a shoot/don’t shoot task (Sadler et al. 2012).

Because little is known about what exact indicators most reliably predict discriminatory behavior by a police officer, further research is needed to maximize the promise of using selection criteria to reduce police bias. However, the largest and best apples-to-apples comparison of officers by race and gender recently revealed that White male officers engaged in far more use-of-force incidents in Chicago than female or non-White officers and that this behavior was driven disproportionately by White male officers’ use of force toward Black residents (Ba et al. 2021). In other words, there is recent, strong evidence that who is doing the policing matters in terms of equitable policing outcomes.

Antibias Training

While assessment for bias and background reviews can be helpful for identifying individuals at major risk of behaving in a discriminatory

manner, limiting their entry into the profession, other interventions focus on those already serving as police officers. Antibias training is one such approach that has been commonly used across a range of professional domains. However, antibias training programs are likely to be substantially curtailed in many settings, including policing, because of actions by President Donald Trump in his first days in office in 2025. His Executive Order requires all agencies and departments in the federal government to “terminate, to the maximum extent allowed by law, all DEI, DEIA, and ‘environmental justice’ offices and positions (including but not limited to ‘Chief Diversity Officer’ positions); all ‘equity action plans,’ ‘equity’ actions, initiatives, or programs, ‘equity-related’ grants or contracts; and all DEI or DEIA performance requirements for employees, contractors, or grantees.”²

Nevertheless, many forms of antibias training are likely to continue to be available and accessible to police departments. Antibias training is a family of programs “aimed at facilitating positive intergroup interactions, reducing prejudice and discrimination, and enhancing the skills, knowledge, and motivation of participants to interact with diverse others” (Bezrukova et al. 2016, 1228). With respect to policing specifically, the *Final Report of the President’s Task Force on 21st Century Policing* (US Department of Justice 2015) encourages the implementation of implicit bias training for police officers (see also Fridell 2016; Swencionis and Goff 2017). A survey of over a hundred police departments in large metropolitan areas revealed that 96 percent had implemented some form of antibias training program, typically with a focus on implicit bias (CBS News 2019).

While antibias training in recent years has been a booming business that has earned billions of dollars annually, assessments of its effectiveness have yielded mixed results (Devine and Ash 2022; Dobbin and Kalev 2022). However, findings that appear to indicate inconsistent evidence of effectiveness can be reconciled

by considering the different ways effectiveness has been assessed. Determining whether antibias training is effective depends on the criteria applied. The evidence of the impact of antibias training is consistent for specific types of outcomes.

One of the most common outcome measures of the effectiveness of antibias training is evidence of prejudice reduction toward traditionally underrepresented groups. However, there is no existing evidence that raising consciousness about implicit bias can produce significant changes in discriminatory behavior (Swencionis and Goff 2017), and there are not sufficient results to make the case that even more comprehensive antibias training can reduce explicit or implicit bias in an enduring way (Greenwald, Dasgupta et al. 2022; Paluck et al. 2021). Both explicit and implicit racial biases are deeply entrenched, often supported—intentionally and sometimes unintentionally—by images in the media and interconnected within a web of social relationships and political orientations and grounded in long-term socialization experiences. Prejudice and stereotypes appear to be highly resistant to change on the basis of antibias training, which tends to be limited in duration.

Nonetheless, when other outcomes are considered, there is consistent evidence of benefits of antibias training. Antibias training does increase people’s knowledge about concepts such as implicit bias and topics relevant to improving intergroup relations. It often piques interest in learning more about ways to improve relations between members of different social groups and motivates people to behave more equitably toward others (Bezrukova et al. 2016).

Regarding antibias training in the context of policing, there is evidence that learning about the science underlying work on implicit bias can increase police officers’ recognition of the potential negative impact of implicit biases on racially equitable policing and create more positive attitudes toward antibias training (Vitriol et al. 2024). Participation in antibias training

2. Exec. Order No. 14151, *Executive Order: Ending Radical and Wasteful DEI Programs and Preferencing*. <https://www.whitehouse.gov/presidential-actions/2025/01/ending-radical-and-wasteful-government-dei-programs-and-preferencing/>.

can, in turn, further expand police officers' knowledge of implicit biases and increase their intentions to apply antibias strategies to reduce the impact of implicit bias on their professional actions (Kochel and Nouri 2024).

However, the evidence of long-term change in behavior directly caused by antibias training is weak: there is currently not strong or consistent evidence that antibias training can produce an enduring influence on police behaviors (Machado and Lugo 2022; Worden et al. 2024). For example, Calvin Lai and Jaelyn Lisnek (2023) assess the results of a large-scale antibias training—the Managing Bias program, which was developed by the Anti-Defamation League—involving over 3,500 police officers. The main goals of this daylong training were to reduce the influence of bias in interactions and decision-making by police officers, improve police-community relations, and increase officer safety. Participants engaged in activities to increase their awareness and understanding of bias and to build skills (such as perspective taking and individuation) to help reduce bias in policing. The researchers find that the training increased knowledge of bias immediately after the session and one month later. It also increased, relative to the pretraining baseline levels, concerns about holding biases and personally behaving in a discriminatory way, as well as intentions to use the strategies they learned to address bias. However, these effects were fleeting: they were not significantly different from baseline one month later. The researchers therefore conclude that “diversity training[s] as they are currently practiced are unlikely to change police behavior” (Lai and Lisnek 2023, 424). Similarly, a one-day antibias training with over fourteen thousand New York City police officers failed to produce any significant changes in racial disparities in stops, frisks and searches, summonses, arrests, and use of force (Kochel and Nouri 2024).

Rather than dismissing entirely the potential benefits that antibias training (particularly with an emphasis on implicit bias) can have for reducing racial discrimination in policing, Jack Glaser (2024) proposes tailoring such interventions with police officers to focus on actions most vulnerable to the influence of implicit

bias. Specifically, he suggests that, because implicit bias tends to influence highly discretionary behaviors (such as stop-and-search decisions) more strongly, both the training and its assessment might concentrate on these types of policing activities. However, antibias training that emphasizes implicit bias may inadvertently undermine people's motivation to exert the effort needed to overcome the influence of implicit bias on their behavior. Because implicit bias reflects a high degree of automaticity and thus limited controllability, when discrimination is attributable to implicit bias people are perceived to be less accountable for their actions and view their discriminatory behavior as less deserving of punishment (Daumeyer et al. 2019).

When trainings are viewed as a cure-all, therefore, the science is clear that any form of training is likely to be a weak lever for change at best. When viewed as a signal about cultural norms, however, trainings may yet prove valuable. While poorly integrated diversity, equity, and inclusion efforts can send the wrong signals about institutional norms and values (Dover et al. 2020), this same research literature holds out hope that, framed correctly, trainings can be part of an organizational signal that combating discrimination is important. Trainings, therefore, need not be dismissed if they do not provide immediate changes in behaviors. Rather, they must be understood in the context of their broader organizational context.

Focused Training

While attempts to reduce levels of explicit and implicit prejudice through antibias training have had limited success, training that is focused primarily on developing and practicing skills related to specific aspects of policing promises greater success, at least in the laboratory. For instance, research has shown that with practice on the shoot/don't shoot simulation paradigm, police officers, in general, are able to reduce their discrimination against Black (relative to White) targets on this task (Peruche and Plant 2006). This reduction in racially discriminatory responses on this task is particularly strong for officers who have previously had relatively high amounts of positive

personal contact with Black people. Other research (Sim et al. 2013) also has demonstrated that training on a shoot/don't shoot task reduces racially biased errors by police officers when race is unrelated to the presence or absence of a weapon. However, when Black people are experimentally associated or chronically associated with danger (for police officers who routinely deal with minority gang members), training does not reduce racial bias on the task but may exacerbate it. Taken together (while recognizing the existence of boundary conditions), these findings reveal the potential for narrowly tailored training involving activities in which officers have opportunities to practice their skills to reduce police use of lethal force. However, such training requires the use of appropriate scenarios and simulations to facilitate their application to the conditions under which they may be enacted within the duties of police officers (Fridell 2016).

An alternative approach involves training police officers in new skills for effectively interacting with community members to prevent conflict escalation, thereby reducing the perceived need to use force. Currently, police academies in the United States devote over three times more hours to firearms training than to de-escalation techniques (Horton 2021). While there is very limited evidence concerning whether de-escalation training works and reduces racial disparities in policing (Agan 2024; Engel et al. 2020), there are techniques that may help de-escalate conflicts between police officers and community members and reduce racial disparities in policing. George Wood, Tom Tyler, and Andrew Papachristos (2020) tested the impact of a one-day procedural justice training program with the Chicago Police Department. The intervention “emphasized the importance of voice, neutrality, respect, and trustworthiness in policing actions.” Before making a decision, “officers were encouraged to provide opportunities for civilians to state and explain their case.” The officers were also encouraged to “apply consistent and explicable rules-based decision-making, treat civilians with dignity and respect their status as community members, and demonstrate willingness to act in the interests of the community and

with responsiveness to civilians’ concerns” (Wood et al. 2020, 9815). This training provides officers with a broader range of strategies, grounded in a body of empirical evidence, for handling challenging encounters more effectively. It also communicates priorities and norms of the department, which can influence behavior in additional ways beyond the specific knowledge and skills acquired in the training. This training significantly decreased officers’ use of force in the community. Before training, in a police force made up of 7,785 police officers, there were 363 use-of-force incidents per month. After training, according to a conservative estimate, there were 8 fewer use-of-force incidents per month; according to a more aggressive estimate, there were 156 fewer use-of-force incidents per month.

While any officer trainings that yield positive results in the field should be lauded, they would be incapable of correcting for policies or cultural norms that produce unequal outcomes. Consequently, we turn our attention next to micro-level processes.

MICRO-LEVEL PROCESSES AND BIAS IN POLICING

We describe the influence of micro-level processes as the Bully because these effects occur through interpersonal encounters, which potentially inflict harm on an individual with cascading influences on other members of the person’s social group. This literature relies heavily on psychology research and involves samples drawn from the general population to illuminate relevant underlying dynamics that may contribute to racial disparities in policing. Micro-level processes in racial discrimination in policing are more directly implicated in studies testing these effects with police officers in their actions toward and in interaction with community residents that produce discriminatory treatment of members of particular racial or ethnic groups.

Interpersonal Processes

As with nano-level influences involving intrapersonal processes (for example, stereotyping), research across the behavioral sciences—including in psychology, sociology, criminology,

economics, and political science—implicates the role of micro-level (interpersonal) bias in racial disparities in policing. A variety of different methodological approaches are used (National Academy of Sciences, Engineering, and Medicine 2018), but one common way of testing for racial bias is by examining differences in police behavior while controlling for other likely influences. In this respect, the finding that police are more likely to use force against Black or Latine targets than White targets is observed even after controlling for target demographics, such as age or gender; and other characteristics, such as intoxication, mental impairment, or possession of a weapon; officer characteristics, including race or experience; features of the incident, such as time of day, target arguing, target attempting to get away, target directly resisting arrest, number of bystanders, number of officers; geographic area; and community characteristics, such as socioeconomic status, crime rate, or the percent of non-White residents (see, for example, Lee 2016; Paoline et al. 2018). Sometimes these studies employ quasi-experimental designs, such as the “veil of darkness” paradigm, which has been used for studying racial bias in vehicular stops by police. The logic behind this approach is that because darkness tends to mask the physical appearance of a driver, police racial bias is directly implicated if racial disparities in vehicle stops are lower at night than in daylight. An analysis of ninety-five million stops for fifty-six police agencies and departments nationwide reveals higher rates of stops for Black motorists than White motorists during the day, but far more equitable stop rates at night when ambient factors (such as neighborhood crime, poverty, and so forth) are included (Pierson et al. 2020). Moreover, the reduced racial disparity in stops at night is primarily due to a markedly lower likelihood of Black drivers being stopped at night compared to during the day.

The micro-level of analysis is broadly interpersonal. It considers the action of police toward residents, the orientations and behaviors of residents toward police, and the reciprocal relations of police officers and residents in their interactions. The processes have been studied by researchers across multiple behav-

ioral science disciplines drawing on a range of different methodological approaches.

Psychology

The traditional approach in psychology has been laboratory research using designs with experimental manipulations and appropriate controls to form cause-and-effect inferences. Psychological analysis is thus complementary to the types of approaches frequently used in other behavioral science disciplines. With respect to understanding situational-level dynamics of racial bias in policing, the relevant research builds on foundational interpersonal processes identified in psychological research and the application of these dynamics to activities related to policing studied with samples unaffiliated with law enforcement and, less often, directly with police samples.

One example of psychological scholarship that leaves the laboratory to answer questions about micro-level discrimination leverages newly available police body-worn camera footage to examine police behaviors during interactions with residents. Early results provide evidence of racial bias in the ways police speak to citizens in their encounters. During routine traffic stops, an analysis of interactions recorded on police body-worn cameras reveals that police officers speak with less respect to Black than to White community members (Voigt et al. 2017) and display a more negative tone in their communications (Camp et al. 2021). While these studies do not allow us to determine to what degree these officer behaviors are driven by intrapersonal, nano-level and interpersonal, micro-level factors or shaped by meso- (organizational), macro- (pan-organizational, institutional), or mega- (cultural) level factors, this line of research at least casts doubt that mere “suspect resistance and/or non-compliance” is the only factor that escalates police-resident interactions, a common argument made in both popular media and research to account for racial disparities in police violence (Terrill 2005).

The availability of body-worn camera footage also potentially allows for quantitative and time-sequenced analyses of encounter escalations—the process of making interactions more tense and likely to produce violence (Ariel

et al. 2016). However, without the help of artificial intelligence, aggregating and coding this footage is labor intensive. Additionally, the footage is not available at scale, making it difficult to know what results will and will not generalize.

Finally, some research integrates the literature on stereotype threat with concerns of being stereotyped as criminal (Najdowski et al. 2015) or as racist (Trinkner et al. 2019). As noted in the section on nano-level processes, stereotype threat represents people's concern about being judged in accordance with unfavorable stereotypes associated with their social identity. Stereotype threat has interpersonal consequences (micro-level effects) relevant to policing, as well as intrapersonal impact (nano-level effects). As research shows, Black participants report higher levels of concern with being stereotyped as criminals than do White participants. That elevated concern leads to higher regulatory efforts, something previous research has identified as producing racial disparities in behaviors that are judged to be indicators of guilt (Najdowski 2011). In other words, as with other stereotype threat domains, concerns with confirming or being evaluated in terms of a racial stereotype ironically produce behaviors consistent with the stereotype that can have direct consequences for how Black people and police officers interact. This is also an area in which nano-level (intrapersonal) and micro-level (interpersonal) processes operate in tandem. There are individual differences (a nano-level influence) in the concern with being stereotyped that reliably predict differences in behaviors (McCarthy et al. 2021; Trinkner et al. 2019), and these behaviors influence interactions between police officers and community residents. It is further possible that processes at the meso-, macro-, and mega-levels, such as discriminatory policies or regional reputations, can moderate the impact of these nano-level and micro-level processes in influencing racial inequities in policing.

The dynamics of stereotype threat in encounters between police officers and Black residents can produce a reciprocal set of influences mutually increasing threat and escalating the potential for conflict and excessive use of force (Najdowski 2023). Indeed, footage from

police body-worn cameras offers supportive evidence for this process (Rho et al. 2023). A linguistic analysis of footage from 577 stops of Black drivers finds that stops with escalated outcomes (that is, those ending in arrest, handcuffing, or a search) differ systematically from other stops from the initial moments of the interaction—even in the first forty-five words spoken by the officer. For stops that escalated, officers were more likely to begin the interaction with commands, without explaining why they made the stop. Black men who viewed the footage perceived more negative emotion, viewed officers more negatively, worried more about force being used, and predicted worse outcomes after hearing only the officer's initial words in escalated versus non-escalated stops. This escalation was likely the outcome of the reciprocal responses, possibly stimulated by stereotype threat experienced by both parties.

Ethnography

The bulk of research on police-resident interactions belongs to ethnographers. For instance, Nikki Jones's (2014) work on interactions between police and youth in California's Bay Area reveals how Black youth learn the informal sequencing of a police stop, as well as when and how they can voice their objections to abuses. Similarly, Rod Brunson's (2007) work reveals which direct and vicarious interactions lead Black youth to believe that "police don't like Black people" (from the title of Brunson 2007), as well as how those observations create both ideologies about policing and specific tactics to navigate communities where those same police are omnipresent. These findings build on a generation of ethnographic observations about police-resident interactions. However, while work such as Elijah Anderson's (2013) *Streetwise* paints incredibly detailed pictures of how aggregated interactions with police shape neighborhood mindset and praxis, the quantitative tests of how these observations scale beyond the communities in which they are observed have lagged behind considerably.

Criminology, Economics, and Political Science

Other quantitative fields have developed literatures at the micro-level, particularly economics and political science. The (mostly) economics

literature around “hit rates” (the rate at which officer searches yield contraband) is a notable example. Much like the “cover of darkness” methodology, the literature on hit rates (or yield rates) attempts to bypass a common methodological problem with analyzing and determining the causes of racial disparities in police behavior—namely, that the universe of possible outcomes is rarely known. In other words, it is difficult to tell whether there is racial discrimination in police use of force without being able to account for all incidents where force might have been used but was not. Analyses of the rate at which police searches yield contraband (“hits”) sidestep this methodological limitation (at least in part; see Knox et al. 2020) and by testing the outcomes of a conditional action—that is, a search. The result of such tests (Knowles et al. 2001) reveals that, even if we set aside whether a decision to search someone is racially biased, officers are robustly not using the same criteria for searching Black residents as White residents—and the result is less effective policing generally, even beyond the potentially racist consequences. This tendency to “over-search” Black residents could stem from departmental policies or a broader culture in policing (see Rattcliffe 2004), yet there is some evidence of individual differences.

Along these same lines, economists and political scientists have recently provided the best test yet of the importance of micro-level phenomenon. Specifically, an unparalleled matching study in Chicago concluded that police demographics play a major role in police use of force, with White men accounting for significantly higher rates proportional to the number of Black men they target (Ba et al. 2021). While it is not clear if or how these results generalize, this first true apples-to-apples comparison of officers by location, shift time, and department suggests that individual differences may play an underappreciated role in how interactions with police produce community violence—a merging of nano- (intrapersonal), micro- (interpersonal), and meso- (organizational) level processes.

One theme across all these micro-level literatures is that it is difficult to disaggregate micro-level processes from processes at other

levels. Another way to frame that methodological hurdle is this: racial discrimination exists at so many levels and so far before a particular police-resident interaction that it is often difficult to tell when the police are the problem or when the outcome of the interaction is merely a symptom of a larger issue. Dean Knox, Will Lowe, and Jonathan Mummolo (2020) make this point in a highly technical article by demonstrating the many steps one must take to demonstrate racial bias at the level of an individual stop—often preventing scientists, litigators, and policymakers from making appropriate inferences about racism in policing. Importantly, they admit that getting access to all the data necessary to conduct the ideal analysis is impossible in many cases. (The article, notably, does not feature any analyses of police data.)

This theme is worth noting because, ironically, while the first two levels of sociopolitical organization (nano, involving intrapersonal processes, and micro, focusing on interpersonal processes) are the levels at which it is most difficult to tie processes to outcomes, they are also the most commonly invoked in national conversations about racism. In other words, the hardest levels to prove are the most common to be highlighted in discourse, making broad consensus concerning when and where racism is functioning that much harder.

Micro-Level Interventions

Previous research suggests some interventions that can produce reductions in interpersonal, micro-level-driven discrimination. For instance, Lorraine Mazerolle, Emma Antrobus, and colleagues (2013) found that providing officers with scripts can reduce their tendencies to treat people unfairly. This type of research is part of what has led many to speculate that appropriate reductions in officer discretion can reduce situational-level discrimination (Swencionis and Goff 2017). Similarly, there is evidence that trainings that focus on specific behaviors (for example, negative speech acts such as those observed by Voigt et al. 2017 and Camp et al. 2021) can change the desired behaviors (Sim et al. 2013).

Oeindrila Dube, Sandy Jo MacArthur, and Anuj Shah (2025) developed a micro-level inter-

vention that involves reframing the way interactions with community members are perceived by police officers. The training also relies on nano-level principles in the guidance it provides. While the evaluation of the training did not assess differences in responses as a function of the race of those suspected of criminal activity, the intended impacts of the intervention are ones that have the potential to reduce racial inequities in policing outcomes. In this intervention, over two thousand officers from the Chicago Police Department participated in a randomized control trial in which about half of the officers received the training, while the other half were assigned to a control condition. The main objective of the training was to help officers respond effectively to ambiguous situations by “going beyond one’s first impression and develop additional possible explanations for what is occurring” (752–53). Specifically, in this training intervention, officers learn to recognize and regulate their emotional and physiological responses in policing-relevant situations and to develop new skills to help them consider various ways of responding to the situation and their consequences. In this training, officers practice applying the various elements of the intervention in twelve simulation exercises. Police officers assigned to the control condition participated in other types of trainings available to them through the department.

Approximately four months after the intervention was completed, participants in the study completed an assessment involving a series of tasks measuring how they thought about and would respond to several policing situations. Also, one year after the training was completed, the researchers analyzed administrative data to examine potential changes in policing outcomes. Overall, the intervention was effective in training officers to think differently about policing situations by considering a broader range of alternative interpretations of the behavior of others. Officers in the training condition, compared to those in the control condition, were better able to adapt their interpretations and responses as the situation changed (for example, by lowering their experience of threat when the person drops a weapon and identifying a greater variety of ways to respond to the situation). The analysis of admin-

istrative data one year later revealed less use of nonlethal force and fewer discretionary arrests among officers who participated in the training compared to those who did not. As previously noted, the design and evaluation of the intervention did not permit tests of the influence of the race of the person suspected of a crime on the impact of the training, but because the negative and relatively rigid thinking associated with racial prejudice and stereotyping is a significant determinant of discriminatory responses, this intervention represents a promising approach to reducing racial inequities in policing, as well.

Another type of intervention that holds promise for reducing racial inequities in policing relates to the role of peers in interracial interactions. In our multilevel framework, we define the micro-level as involving interpersonal processes related to the interactions between individuals or small groups of people. Policing activities often involve more than one police officer, and thus micro-level influences to reduce racial inequities in policing can involve interventions by police officers to prevent racial discrimination by another officer.

There is a substantial and still growing literature on the effectiveness of “bystander intervention to bias” trainings in general. These trainings aim to increase individuals’ awareness, intentions, skills, and efficacy for taking action to prevent harmful, racially discriminatory acts by others. Although people generally believe they will intervene to prevent or stop racial discrimination from occurring if they have the opportunity, research reveals that when confronted with such situations they are substantially less likely to intervene (Kawakami et al. 2009). The case of George Floyd, who was murdered by Minneapolis police officer Derek Chauvin while three other police officers looked on, is a tragic example of police bystander nonintervention. There is considerable empirical evidence that bystander intervention in bias training can reduce racially discriminatory acts across a wide range of social and organizational contexts (see Goodwin et al., forthcoming, for a review). In addition, while the evidence of the effectiveness of this training on the actual behavior of police officers is still limited, this kind of training has been shown to

increase police officers' stated likelihood in taking actions and their confidence in intervening to address peers' or supervisors' unethical and potentially dangerous behaviors (Taniguchi et al. 2022).

Although an objective of the micro-level interventions we have discussed in this section is to increase police officers' knowledge of a problem, their motivation to address it, and the acquisition of appropriate skills to do so effectively, we acknowledge that major reductions in racial inequities in policing would also benefit from complementary initiatives at other levels. In the case of promoting bystander intervention to bias in the context of policing, while training may help police officers develop skills to intervene effectively, a macro-level policy intervention by the Department of Justice is likely to stimulate the action in which these skills can be applied. Specifically, the US Department of Justice (2025) updated its policy on use of force in July 2022 to include section 1-16.400, Affirmative Duty to Intervene, that states, "Officers will be trained in, and must recognize and act upon, the affirmative duty to intervene to prevent or stop, as appropriate, any officer from engaging in excessive force or any other use of force that violates the Constitution, other federal laws, or Department policies on the reasonable use of force" (US Department of Justice 2025). Coordinated initiatives across different levels of sociopolitical analysis, because they draw on multiple forms of influence, are likely to be more effective at producing racially equitable (and effective policing) than are efforts concentrated in a single level of analysis.

MESO-LEVEL PROCESSES AND BIAS IN POLICING

We personified meso-level processes—which are organizational influences—in our framework as the Bureaucrat because meso-level processes can create and sustain racial disparities in policing through racially discriminatory organizational policies and practices without conscious intention or even awareness of bias among those who execute those policies and procedures. That is, meso-level biases are typically implicated by discriminatory outcomes. Our meso-level analysis of racial disparities in

policing in the United States considers potentially discriminatory organizational or institutional influences that can operate independently of an individual's attitudes or intentions. While many police organizations revised their policies (for example, on the use of choke holds) following the 2020 murder of George Floyd, there has been some backsliding, and there is not consistent evidence that racial disparities in policing generally have substantially declined since then (*PBS News Hour* 2024). Meso-level biases perpetuate discrimination by creating rules that govern interactions. These rules, in turn, inform beliefs, practices, and policies of collectives. It is important to note, here, that we distinguish the policies and practices of a single organization (meso-level) from the policies and practices of an entire industry (macro-level). While these processes are sometimes viewed as passive mechanisms representing vestiges of historical discrimination, they produce "collective, supra-individual entities [that] are indeed capable of exhibiting perspectives, perceptions, and processes, much like individual organisms" (Desai, Laubscher, et al. 2023, 156). Although organizations are often assumed to be race-neutral bureaucratic structures, the perspectives, perceptions, and processes embodied in organizational structures and functions are frequently racialized. Racialized organizations increase the agency of some groups and reduce it for others, legitimize unequal distribution of resources, and may allow inequitable practices that are decoupled from organizational rules (Ray 2019).

Even people who are motivated to be egalitarian may contribute to unfair outcomes because they enact policies that systematically disadvantage one or more groups (Kovera 2019; Yearby et al. 2020). In other words, when the rules of a particular organization or institution produce unequal outcomes, it does not require individual animus for inequities that contribute to disparities to follow.

Culture, which encompasses shared knowledge and beliefs and normatively acceptable social behavior, is a central mechanism for organizing individuals into an entity. The culture of an organization or institution reflects ideals and beliefs that are shared across the organization and passed along to new members and

that provide guidance when addressing new or ongoing problems or situations (Schein 1990). We consider three different aspects of organizational culture and their potential relationships to racial discrimination in policing: police culture and prototypes, culture of justice, and cultural levels in police organizations.

Police Culture and Prototypes

As explained by self-categorization theory (see Reimer et al. 2022), the ideals of group culture are represented by prototypes, which are exemplars that embody attributes central to the definition of the collective. People within an organization are highly motivated to pursue and conform to that ideal, and bias against members of other groups is typically a by-product—not necessarily the explicit objective—of this process. Within policing in the United States, two prominent prototypes are the “warrior” and the “guardian.”

Warrior Prototype

As Amie Schuck (2023, 1) explains, a warrior police prototype prioritizes “the crime-fighting mission, stresses control-focused communication approaches, and characterizes the relationship between the police and the community as detached and guarded” (see also Balko 2021). The warrior prototype valorizes gun-centric, aggressive masculinity. Seth Stoughton (2014; see also Simon 2023) has observed that police culture and training within the United States encourage the development of a warrior mindset and mentality in which police officers “are taught they live in an intensely hostile world, a world that is quite literally gunning for them” (Stoughton 2014, 227). Beginning from their time of training in police academies, officers are encouraged to conceptualize their relationship with the public as a war, identifying their enemy in gendered and racialized ways, primarily as Black and male (Simon 2023). This orientation contributes substantially to a tendency for police officers to perceive a threat from the initiation of an interaction with a resident, particularly a male member of a minoritized groups, and therefore to respond with excessive force, leading to negative outcomes that are more violent than the situation warrants. Indeed, greater officer endorsement of tradi-

tional police culture—which includes distrust of the public, distrust of community members, a crime-fighting orientation, and concerns about danger and bravery (Crank 2014; Paoline 2003)—relates to greater support for use of force and less support for policing that involves treating community members with respect and helping residents in ways that go beyond what is necessary to resolve a situation (that is, procedural justice; Silver et al. 2017). Adopting a warrior mentality can contribute to racial disparities in policing through processes of discrimination. For instance, one study (Mummolo 2018) finds that across departments in Maryland, SWAT teams are disproportionately deployed to Black, compared to White, communities—even when researchers control for crime rates.

Guardian Prototype

In contrast to the warrior prototype, “the guardian orientation prioritizes the service mission of the police, values creating authentic connections with residents and building meaningful partnerships with representatives of the community, and emphasizes using communication approaches grounded in dignity and respect” (Schuck 2023, 1). While there have been frequent calls for law enforcement to move away from the warrior mindset to a guardian mindset to reduce excessive use of force (for example, McLean et al. 2020), this may not be sufficient to achieve racial equity in policing. One reason is that the warrior and guardian orientations are not as antithetical as they might initially appear. They can, in some forms, represent aggressive and violent policing. Indeed, officers who are more supportive of aggressively enforcing the law are also more supportive of the guardian orientation (Clifton et al. 2021). Moreover, both the guardian orientation and the warrior orientation frequently reflect a racialized image that also promotes discriminatory use of force against Black people and members of other minoritized groups. Jennifer Carlson (2020, 399) reports, on the basis of seventy-nine in-depth interviews with police chiefs across the country, “Whereas the ‘warrior’ brand of police masculinity emphasizes aggressive enforcement against (black and brown) perpetrators, the ‘guardian’ brand of

police masculinity emphasizes assertive protection on behalf of (white) victims.”

Racialized aggressive policing guided by either warrior or guardian mentality enforces racial dominance through policing practices. Consequently, both warrior and guardian mentalities can perpetuate racial disparities and discrimination in policing through meso-level mechanisms in combination with individual-level processes. “Over-policing” the public generally, and Black members of the public specifically, increases the frequency of contentious police-resident contact. This contact often escalates into police use of force generally, and especially when officers adapt a “warrior-style” approach “that normalizes the expectation of unquestioned compliance with police directives and authorizes police to use physical force in its absence” (Cobbina-Dungy and Jones-Brown 2023, 3). As discussed in the section on interpersonal, micro-level processes, such practices erode trust between police officers and residents, harm members of the community generally, and reduce community member cooperation with law enforcement—which can increase the crime rate in the community. A higher crime rate, in turn, becomes a justification for further over-policing and use of force by police. A higher crime rate in a locality is a strong predictor of greater use of force by police (Shjarback 2018).

Organizational Culture of Justice

The concept of organizational justice, which is the extent to which a formal entity is perceived to operate in a fair and equitable manner, is important across various types of businesses and groups. The perception of employees of greater organizational justice relates to more favorable attitudes toward the organization, better performance, stronger commitment, and less employee turnover (see, for example, Cropanzano et al. 2007; Masterson 2001). Organizational justice is a particularly important dimension of police culture. Within police agencies and departments, organizational fairness is a central theme in the way police officers think about and describe relationships within their agency and with community groups, as well as in how they act toward community members (Radburn et al. 2022).

One aspect of fair treatment that is especially critical for effective policing is procedural justice, which involves fairness in the ways that decisions are made and disputes are resolved (Tyler and Nobo 2022). Procedural justice involves four aspects of how police agencies function internally and in their relations with communities: participation (providing voice), neutrality (treating people fairly, without bias), treating people with dignity and respect, and conveying trustworthy motives. The perception of procedural justice within a police agency or department, as well as in organizations more generally (Ambrose et al. 2013), is associated with several aspects related to organizational effectiveness. With respect to police agencies and departments, a review of the relevant empirical literature finds that police officers’ perceptions of procedural justice in organizational decision-making “positively influences their views of decision outcomes, trust in the administration, job satisfaction, organizational commitment, desire to stay with the agency, and overall views of the agency” (Donner et al. 2015, 153). A fair and just organizational police culture has a cascading impact on police-community relations.

Greater commitment to procedural justice relates not only to more positive internal relations with other officers in the department but also to more favorable and cooperative external relations with the public (“inside-out” policing; Van Craen 2016). Research on organizations in general has found that “employee perceptions of procedural and distributive fairness were related to (i.e., trickled-down to) customer reactions through their influence on employee commitment and customers’ perceptions of fairness” (Ambrose et al. 2013, 679). Within policing, Rick Trinkner, Tom Tyler, and Phillip Atiba Goff (2016) demonstrate that police officers who perceive their department as more procedurally fair trust and obey their supervisors more, experience greater personal well-being, and endorse democratic forms of policing more strongly. Police officers who view their organization as fairer and more just are also less likely to adhere to “the code of silence,” believe that “noble cause” corruption is justified, and personally engage in misconduct (Wolfe and Piquero 2011). In other research, po-

lice officers across four cities who perceived their department as higher in organizational justice had (internally) greater commitment to their department and (externally) more trust in the public (Carr and Maxwell 2018).

James Carr and Sheila Royo Maxwell (2018) further find that police officers who perceive a higher level of organizational justice (particularly, procedural justice) in their department more strongly endorse community-oriented policing. Community-oriented policing promotes police-community cooperation informally through friendly neighborhood interactions and formally in meetings (such as community advisory boards; see Prowse and Goff 2023). Indeed, even a single positive interaction initiated by a police officer with a community member can improve attitudes toward police and increase perceptions of police legitimacy for both Black residents and White residents (Peyton et al. 2019). A primary goal of community-oriented policing is to produce “partnerships and problem-solving techniques to proactively address the immediate conditions that give rise to public safety issues such as crime, social disorder, and fear of crime” (Office of Community Oriented Policing Services, n.d., 1).

Levels of Police Culture

Although much of the research on police culture has focused broadly on the shared institutional culture of policing, which Gary Cordner (2017; see also Ingram et al. 2018) describes as occupational culture, police officers belong to many different groups and thus may be aware of and adhere to the norms of multiple subcultures (see Schein 1990). These subcultures can affect officers’ propensities to engage in excessive force against Black people and to tolerate such acts by other police officers (Micucci and Gomme 2005). In addition to institutional culture, there are subcultures within policing at the organizational level (reflecting the distinctive orientation of each specific agency and the community in which it is located) and within an organization at the levels of rank (involving cultural variation based on an officer’s position in the organization’s structure) and unit (such as patrol groups).

Occupational police culture, which is a culture widely shared across police organizations

(a macro-level phenomenon), is extremely resistant to change because it is shaped by traditions and other influences beyond the department or agency and outside the responsibility and influence of police leaders, such as police union influences and community attitudes (Hehman et al. 2018). But reshaping local cultures (which reside in the meso-level), such as those of an agency or department (that is, at an organizational level) or unit, is more possible.

Meso-Level Interventions

Reshaping culture and ultimately police behavior at an organizational level involves changes in beliefs, priorities, practices, and formal policies at an agency or departmental level. While an arduous task, the potential impact is significant. Organizational characteristics are a much stronger predictor of officer endorsement of traditional police culture than are individual characteristics (Silver et al. 2017). Police leaders’ efforts to change the culture at the level of their agency or department are more likely to be successful when they target specific, key aspects of the culture. People are generally resistant to cultural change because they are highly motivated to value cultures in which they have been socialized, and thus they view change as threatening. How changes are pursued is as important as what aspects of culture are being changed. Changes seen as consistent with core values and as benefiting the group and its members are most likely to be successful. A major aspect of organizational change in policing involves treating officers in ways that represent how police officers should treat the community. In this section, we consider initiatives for organizational culture and policy changes.

Leadership and Organizational Culture Changes

Within an organizational context, leaders play a fundamental role, both formally and informally, in group dynamics, and ultimately in the culture, of the groups that they lead (Haslam et al. 2020). This influence is particularly pronounced in formally hierarchical organizations with a clear chain of command, such as in police agencies and departments. In organizations structured hierarchically, authority of the

leader is explicitly acknowledged, and the leader has the responsibility to make certain decisions and enforce compliance with rules and policies.

Beyond the formal bases of influence within a group, leaders also have broad psychological, and ultimately, behavioral impact. Leaders are seen as embodying the values of a group and thus help shape the meaning that individuals within the group attach to group membership. Thus, in addition to their formal influence in making decisions and enforcing compliance with rules and policies, police leaders have broad psychological impact (Ingram et al. 2023). A police leader is a uniquely powerful role model, and the values and motivations the leader professes and the actions the leader exhibits have enduring influence on how members relate to each other and with the outside community (Dubord and Griffiths 2021). As Fei-Lin Chen and colleagues (Chen et al. 2021, 893) note, “One of the plausible mechanisms of promoting fair and accountable policing on the street is that police agencies and supervisors treat rank and file officers fairly and justly.” Thus, sustained cultural change can occur through the exchanges that police leaders model and foster within an agency or department.

As discussed in the section on micro-level interventions, training programs to help police officers develop procedural justice-related skills in their interactions with community members significantly reduce police use of force incidents (Wood et al. 2020). Procedural justice training for police officers also increases the perceived legitimacy of the police among community members and community members’ trust in and willingness to cooperate with the police (Mazerolle, Bennett, et al. 2013). From the perspective of community members, as the *Final Report of the President’s Task Force on 21st Century Policing* (US Department of Justice 2015) emphasizes, the perceptions of the police as fair and policing as legitimate are foundational for effective policing.

Beyond providing the opportunity for officers to acquire specific skills, such interventions also communicate the priorities of police leadership, influencing officers’ perceptions of organizational values and norms. In fact, the

communication of organizational priorities and norms signaled by new training initiatives may have more impact on organizational change than the acquisition of particular skills through training. For instance, Emily Owens and colleagues (2018) developed an intervention to test the influence of the behavior of supervisors that communicated the importance of procedural justice on officers’ actions in the field. In this experimental test, police officers were randomly assigned to a nonintervention control condition or to an intervention condition in which the officer would meet with a supervisor to discuss an incident involving the officer and for which a report had been filed or an arrest had been made. In this meeting, the supervisor explained that procedural justice was a central part of the department’s mission, and then the supervisor modeled and discussed procedural justice in relation to the incident with the officer. The outcome measure of interest was the subsequent behavior of the police officer. Officers who participated in the intervention made fewer discretionary arrests and were less likely to be involved in incidents in which force was used. These effects were particularly pronounced among officers who worked in areas with a modest level of risk, defined as locations where other officers tended to use force, were injured, or received complaints from citizens.

Moreover, the relationship between police agency internal functioning and engagement with the community is reciprocal. Prioritizing procedural justice practices internally and externally in policing increases trust among police officers and community members, and trust is needed to create productive police-community partnerships (O’Brien and Tyler 2019). Collaborations between police and community partners as part of a public safety system that seeks to address factors that contribute to crime in order to prevent it from occurring reduce mutually experienced threat and improve attitudes. Such conditions of more cooperative and trusting police-community relationships, in turn, can facilitate further changes in police organizational culture. In general, groups are more open to adopting supportive orientations toward members of other groups in contexts that are char-

acterized by cooperation rather than conflict (Arendt et al. 2023).

Policy Changes

While attempts to change police culture at an organizational level can have broad and enduring impact if successful, the most direct way to reduce racial disparities and discrimination in policing is through strategic changes in agency or departmental policies (Durán and Shroulote-Durán 2021). The influence of policies restricting officer discretion in the domains of domestic violence (for example, mandatory arrest), high-speed pursuits (do not engage in them), and treatment of juveniles (for example, when and under what circumstances to ask questions) has been well documented in the literature, producing the commonsense consensus that policy was the tool by which policing could be aligned with community values. During the late 1980s and 1990s, criminologists attempted to extend this understanding to the realm of police violence.

Researchers investigating what mechanisms could reduce unnecessary or particularly brutal police use of force coalesced around the notion that strict regulations through policy were the answer—an institutional or organizational response to aggregated individual problems. As noted earlier, allowing greater discretion in action permits people’s racial biases to exert more influence on their behavior. This principle is also reflected in policing practices and outcomes (Swencionis and Goff 2017). In general, restrictive policies, which limit officer discretion, have reduced a variety of negative consequences related, for example, to high-speed pursuits (Alpert and Madden 1994) and misidentification of people based on eyewitness evidence (Kovera et al. 2022). There is strong evidence that restrictive rules can reduce police use of force and or killings generally (Fyfe 1988; Geller and Scott 1992; White 2001). Nevertheless, while it is likely that restrictive policies that generally reduce officer use of force may also reduce racial disparities in lethal and non-lethal use of force because they limit officer discretion (Swencionis and Goff 2017), there is a relative dearth of evidence about what kinds of policies particularly reduce racially discriminatory behaviors and outcomes.

When police organizations have policies (such as incentives, sanctions, and required in-service trainings) that attempt to control officers’ discretionary decision-making, they reduce the likelihood of misconduct (Eitle et al. 2014). Regular in-service training throughout the year can result in reductions in police misconduct (Eitle et al. 2014). In terms of officer use of force, departments that have adopted more restrictive use-of-force policies demonstrate lower rates of use-of-force incidents (Terrill and Paoline 2017). Even policies that do not directly restrict use of force but mainly monitor it more closely can reduce it. For example, research has shown that having a policy requiring a supervisor to fill out the use-of-force reports is associated with less use of force (Alpert and MacDonald 2001) and that instituting a policy requiring officers to report whether they pulled their firearm and pointed it at someone but did not fire reduces instances of overusing firearms as a control technique (Jennings and Rubado 2017). Given the generally much greater use of lethal force with Black than with White people, the personal and social impact of these policies would likely be greater for Black than for White people. Researchers should, however, be cautious about any benefits observed following discretion-restricting interventions as nearly all police-related outcomes are recorded by police officers. In other words, it is often a methodologically painstaking task to determine if the outcome measure improved or whether officers simply stopped documenting the problem behaviors.

Another intervention that reduces discretion in decision-making and action that has been increasingly implemented across the justice system in the United States is the use of automated decision-making technology to achieve “algorithmic fairness.” While a promising application for policing, to the extent that the data used to inform automated decision-making technology incorporate unrecognized cultural biases or inaccurate historical narratives (Ugwudike 2022) or include inappropriate assumptions in their analyses, these algorithms have the potential to reinforce racial inequities in the justice system. Roland Neil and Michael Zanger-Tisher (2025), for instance, caution that racial biases are likely to result when

these procedures treat arrest data as an unbiased measure of criminal offending because evidence shows the role of prejudice-based discrimination in creating racial inequities in arrests.

Officer body-worn cameras are, among other reasons, a frequently used technique for increasing police officer accountability. A study of the Los Angeles Police Department (McClusky et al. 2019), for instance, finds that body-worn cameras increase the extent to which officers exhibit procedural justice (for example, showing interest, behaving respectfully) in their interactions with community members. With respect to use-of-force incidents, a recent review of approximately seventy empirical studies reveals that the use of body-worn cameras significantly decreases police use of force by 9.6 percent (Williams et al. 2021). However, while the overall effect is significant, some researchers have noted that the impact of body-worn cameras on use of force is variable across studies (Lum et al. 2019). One reason is that the policies in some departments allow officers discretion to turn off the cameras (Machado and Lugo 2022). Another reason might be that because the presumed effect of body-worn cameras occurs, at least in part, by increasing officer awareness and thus compliance with rules and norms (Ariel et al. 2017), the effectiveness of body-worn cameras may depend on departmental or agency norms and culture involving the application of use of force. This latter interpretation suggests the importance of considering the impact of culture and policy in combination in examining police use of force generally and particularly toward members of Black people and other minoritized groups. Police culture can significantly blunt the influence of policy (White 2001). For the use of body-worn cameras to have a stronger and more consistent effect for reducing racial inequities in policing, it may thus be valuable to couple the use of the technology with training interventions that help police officers internalize the principles of racially equitable policing (McDonald 2025).

This possibility is supported by results showing that the impact of body-worn cameras on police behavior can be complex and is moderated by factors such as neighborhood char-

acteristics. For example, in a study of the New York Police Department, the implementation of body-worn cameras reduces community complaints against officers by 21 percent but increases police stops of community members by 39 percent (Braga et al. 2022). Other research has found that implementation of body-worn cameras increases police enforcement activity in areas with a high percentage of Black residents and tends to increase these activities in high reported-crime areas—both neighborhood characteristics normatively associated with greater police enforcement activity (Hughes et al. 2020). Taken together, the findings for the effects of body-worn cameras suggest the value of further research to understand how they influence police behavior (particularly with respect to racial disparities) by considering both organizational and structural (for example, neighborhood) factors. Understanding these effects more comprehensively can also help produce a more accurate cost-benefit analysis of body-worn cameras (for example, considering the effects on reducing community complaints versus the cost of the equipment; see Williams et al. 2021).

MACRO-LEVEL PROCESSES AND BIAS IN POLICING

We described macro-level processes as the Billionaire because these influences involve the control and distribution of a vast array of resources in potentially discriminatory ways across organizations. Like meso-level processes, macro-level processes appear most evident through discriminatory outcomes. One way to distinguish meso- and macro-level processes in racial bias in policing is by thinking about the difference between organizational and systemic factors. Here, we differentiate organizational racial bias (a meso-level influence) from systemic racial bias (a macro-level influence) by the scope of their impacts. Organizational bias relates to normative practices and beliefs, as well as formal policies, that are established within a particular organization (in this case, a specific police department). Systemic bias involves the normative practices, beliefs, and formal policies across an industry (such as the industry of policing) or across multiple industries (for example, government

redlining that influenced lending organizations, insurance companies, and real estate agencies and that trapped Black residents in high-poverty neighborhoods and ultimately produced higher vulnerability to street crime and subsequent police contact). Both organizational and systemic bias differ from bias involving purposeful actions by individuals to disadvantage or otherwise harm a group and its members—that is, intrapersonal, nano-level or interpersonal, micro-level biases.

The distinction between organizational and systemic bias is relevant because of a particular aspect of policing. In the United States, while policing as an industry exists across the country, the structure of policing is predominantly local. From its earliest origins, policing in the United States has been the province of local and state governments. The earliest professionally organized police departments began in major US cities: New York City in 1844, New Orleans and Cincinnati in 1852, Boston and Philadelphia in 1854. Other cities subsequently established their own police departments, and within cities the authority for policing was decentralized to units (an organizational level) functioning at the level of political wards and neighborhoods. Federal police agencies also exist, but the roles of these agencies are typically very specified. For example, the United States Secret Services was created in 1865 to prevent counterfeiting, and the Federal Bureau of Investigation was formed in 1908 to investigate antitrust cases, several types of fraud, and certain crimes committed on government property or by government officials. Thus, while policing may share many common elements and regulations across localities (shared institutional factors), agencies differ substantially in their local circumstances, leadership, challenges, and priorities (organizational factors).

In the previous sections, we considered nano-, micro-, and meso-level processes and how these processes can produce racial discrimination in policing. These levels of sociopolitical organization allow for interventions that improve individual behavior or policies. However, they do not allow for considerations of whether the systems are set up justly in the first place. In this section, we examine how so-

cial forces—historical as well as current—produce disparate outcomes for members of various groups through societal beliefs, policies, and practices. We further pursue a macro-level analysis in the final section by considering alternatives to policing, a growing area of policy interest.

Systemic Influences

Macro-level biases in policing have multiple sources. Elizabeth Hinton and DeAnza Cook (2021, 261) discuss, for example, the “multifaceted ways in which policymakers and officials at all levels of government have used criminal law, policing, and imprisonment as proxies for exerting social control in predominantly black communities from the colonial era to the present” and “the inequity entrenched in the administration of criminal justice in the United States from the top down and the ground up.” Rory Kramer and Brianna Remster (2022) further highlight the economic considerations that shape policing. Policing consumes a substantial percentage of municipal budget, but it also generates income for municipalities. As Shannon Graham and Michael Makowsky (2021, 312) observe, “The criminal justice system, over the past thirty years, has become a common means by which local governments balance their budgets, with many municipalities going so far as to become dependent on fine and fee revenue to maintain solvency.”

The financial benefits from policing frequently and disproportionately come at a direct cost to members of minoritized groups (a form of “racial capitalism,” see Pulido 2017). For instance, many city budgets rely on fines generated by policing practices (Fernandes et al. 2019). Cities with larger Black populations tend to focus more on collecting those fines (Sances and You 2018), and the resources devoted to collecting fines can result in fewer resolved investigations of violence (Goldstein et al. 2020). Moreover, prioritizing revenue generation by law enforcement can fuel discrimination against social and financial segments of the population (Graham and Makowsky 2021). One study shows, for instance, that drug-related and DUI arrests increased for Black and Latine residents, but not for White residents, when police were allowed to retain the proceeds from

forfeited property in their budgets (Makowsky et al. 2019). While increasing involvement of law enforcement does not appear to come at the expense of an increase in violent crime (Makowsky et al. 2019), it does undermine the trust in police among members of the communities most affected (Graham and Makowsky 2021). Policing practices can also create municipal income longer term by facilitating gentrification of particular neighborhoods (Beck 2020; Lanionu 2018).

Systemic processes, often reflective of structural influences, can also contribute more indirectly to racial disparities in policing, potentially attributable, at least in part, to discrimination. We offer an illustrative example that focuses on place—geographic locations in terms of communities and neighborhoods and their associations with racial disparities in policing. Place matters substantially for many key aspects of residents' lives (such as health and healthcare; see Penner et al. 2023), and perhaps because of the local nature of policing, place particularly matters in policing.

One robust finding in the literature on policing outcomes is that police use of force is greater in communities that have residents lower in socioeconomic status, a higher percentage of Black residents, and higher crime rates (Shjarback 2018; see also Braga et al. 2019). In general, policing in communities with these characteristics tends to be aggressive in controlling crime (Boyles 2015). Moreover, the effects of community characteristics on a range of policing outcomes (such as discretionary arrests, mistreatment, use of nonlethal and lethal force) occur independently of individual-level officer characteristics (see, for example, Feldman et al. 2019; Huff 2021; Zhang and Zhang 2021). Also, community socioeconomic standing, racial-ethnic composition, and crime rates often exert influences that are statistically independent of each other (and of additional potentially relevant control factors). For instance, neighborhoods in Boston with 85 percent Black residents experienced fifty-three more street-stop encounters per month relative to neighborhoods with only 15 percent Black residents, when researchers control for crime, police resources, and other factors (Fagan et al.

2016). Community socioeconomic position, racial composition, and crime rates may also have reciprocal causal relationships. Communities with high percentages of Black residents or residents from other minoritized racial and ethnic groups that are also economically disadvantaged and underresourced experience disproportionately high levels of police contact and mistreatment (see Fagan and Davies 2000).

Residential Segregation and Policing

While the associations of community socioeconomic standing, composition, and crime with racial disparities in policing are often statistically separable, these factors are correlated at a societal level and can be traced to similar root causes. They are the legacy of formal and informal policies producing racial residential segregation in the United States (see Penner et al. 2023). A range of structural factors over time have produced high levels of racial residential segregation today, particularly between Black and White people. Racial residential segregation was formally enforced through the institution of slavery, and then subsequently through Jim Crow laws, and through laws and statutes (such as those related to “sundown towns,” which were towns in which Black people had to leave at dark) into the 1960s. Even after the landmark civil rights legislation of the 1960s, restrictive zoning and covenants, federal policies for public housing, redlining for housing loans, and the persistent influence of individual-level racial bias continued to promote residential segregation.

Segregated housing has been and continues to be a major cause of racial inequities in all facets of residents' lives. Policies and individual-level biases that promoted racial segregation in housing also relegated Black neighborhoods to geographic areas that were less desirable, less healthy (because of more exposure to toxins or less access to healthy foods, for example), and more limited in access to essential healthcare services. Clearly, not all majority-Black neighborhoods are underresourced or have residents who are predominantly of low socioeconomic status. Nevertheless, on average, the residents of most predominantly Black neighborhoods are much more likely to be poor than are residents of pre-

dominantly White neighborhoods. Poor Black people are more than three times as likely as poor White people to live in neighborhoods where the poverty rate is 40 percent or more. Segregation is a major contributor to “racialized concentration of poverty” (Massey 2016).

This economic disadvantage limits social mobility. In 2020, lenders were 80 percent more likely to deny a mortgage to Black applicants than they were to White applicants (Glantz and Martinez 2018); economic factors were the most commonly cited explanation for this disparity. Also, high school students from families lower in socioeconomic status are less likely to attend college, have fewer choices about where to attend college, and when they do attend college, they are more likely to attend less selective institutions (Walpole 2003). Areas higher in poverty also tend to have higher rates of reported crime (Sharkey et al. 2016). One study reveals, for instance, that men who grew up in low-income families are twenty times more likely to be incarcerated than men who grew up in high-income families (Looney and Turner 2018). Additional research has identified a direct causal link between poverty and criminality, over and above other related causes such as unemployment (Imran et al. 2018).

Such neighborhood contexts also promote racial bias among police officers. Police officers working in neighborhoods with higher rates of poverty, greater crime, and a higher percentage of Black residents have more negative attitudes and express more negative stereotypes of adolescents in the community (Fix et al. 2023). As discussed earlier, negative attitudes and stereotypes of police officers are a significant driver of racial disparities in policing, including stops, searches, and use of nonlethal and lethal force. These biases are particularly likely to produce excessive and racially disparate use of force in these areas because police officers tend to behave more aggressively in places that they consider more dangerous (Gaston and Brunson 2020).

Disinvestment in Systems of Support

Disinvestment in systems and resources previously used to respond to substance abuse (public parks, homelessness, schools, in-patient hospital crises, and mental health) has been

accompanied by increased reliance on policing, substituting systems of preventive care with systems of responsive punishment (Hinton 2016; Soss and Weaver 2017). Each produces racial disparities by dint of geography, concentrated disadvantage, and bias across levels. Each is a community crisis that used to have significant dedicated resources devoted to preventing and treating it. Increasingly, policing and the threat of incarceration have been the response of first resort (and sometimes last resort, as well). Much has been written about how police can respond to each of these crises more efficiently, equitably, and humanely. However, given the history of each, the question must be asked: why are police the responders we have decided are best equipped to respond to these crises? The case of mental health may be most instructive, as there is a sizable literature on deinstitutionalization and the corresponding rise in policing (Lamb and Weinberger 2020).

The decline in public spending on mental health has been precipitous since the 1950s and parallels an increase in police contact with individuals navigating mental illness (Lamb and Weinberger 2020). However, this apparent trade-off from care to punishment does not track with public opinion. Rather, the public does not have confidence in police officers’ ability to deliver appropriate care to people navigating mental illness (Milam and McElwee 2021), and the limited research on training officers to improve that care reveals an ineffective standard at best (Compton et al. 2008). Similarly, while officers report believing that individuals with serious mental illness should be treated less harshly than other residents and are less culpable for their wrongdoing than their neighbors, a recent analysis of police use of force toward the same population shows major disparities, with persons with serious mental illness experiencing twelve to thirty times higher rates of police use of force than their representation in the population would predict (Laniyonu and Goff 2021).

Macro-Level Interventions

Understanding the systemic and structural (macro-level) processes related to policing and their potential relationships can inform ways to increase the effectiveness of policing, as a

social institution, in addressing crime and doing so in a more racially equitable way. These interventions have often involved more policing (Mello 2019), but strategies emphasizing new ways of policing hold particular promise. Moreover, initiatives for reducing criminal activity related to structural-level influences may not include policing at all or may involve a substantial reconceptualization of policing.

Problem-Oriented Policing

Anthony Braga and colleagues (2019; see also Petersen et al. 2023) propose, with supporting evidence, that problem-oriented interventions generally produce larger decreases in crime than traditional police actions in hot spots without producing mass arrests or unnecessary stops that undermine police legitimacy and erode police-community relations. According to these researchers (545–46), problem-oriented policing is “a proactive crime prevention strategy that seeks to identify the underlying causes of crime problems and to frame appropriate responses using a wide variety of innovative approaches” using “strategies can help safeguard against the use of overly harsh and indiscriminate enforcement tactics.” Such interventions are most effective when they involve working with the community to establish bi-directional communication, facilitate joint problem-solving, promote procedural justice, and build resilience and collective efficacy with an enduring structure for productive police-community relations (National Academy of Science, Engineering, and Medicine 2018). Braga and colleagues (2019, 547) explain: “Developing close relationships with community members would help the police to gather information about crime and disorder problems, understand the nature of these problems, and solve specific crimes. Community members can also help with key components of strategies tailored to specific problems by making improvements to the physical environment and through informal social control of high-risk people. In this way, police strategies focusing on particular people and places would cease to be a form of profiling and instead become a generator of community engagement projects.”

Such police-community partnerships are also effective at increasing perceptions of po-

lice legitimacy, which contributes to more effective policing. When people see the police as more legitimate, they are more likely to adhere to the law and to cooperate with law enforcement in reporting crime and information that is valuable for addressing crime.

Community Organizations

While police-community partnerships can be valuable for improving public safety, community organizations, made up of neighbors and residents alone, can also be very effective. Patrick Sharkey, Gerard Torrats-Espinoza, and Delaram Takyar (2017) identify numerous nonprofit community organizations, such as Alianza Dominicana and the Community League of West 159th Street in New York City, that have played major roles in reducing crime in their communities. Such nonprofits employ a variety of strategies, including building affordable homes and training and hiring formerly incarcerated residents to maintain neighborhood spaces, but they share a common goal of addressing violence and rebuilding community. Testing the often-overlooked impact of community organizations of this type across a sample of 264 cities and examining effects across a twenty-year period, the researchers conclude that “every 10 additional organizations focusing on crime and community life in a city with 100,000 residents leads to a 9 percent reduction in the murder rate, a 6 percent reduction in the violent crime rate, and a 4 percent reduction in the property crime rate” (Sharkey et al. 2017, 1214). Thus, these organizations can significantly reduce crime in the absence of aggressive policing or expanded police presence.

Neighborhood Investment

To the extent that concentrated poverty relates to high levels of criminal activity in a locality, alternative interventions that do not involve policing may be effective for reducing crime by targeting a root cause. One program intended to do this involved creating “Opportunity Zones” in economically distressed areas by offering special tax incentives to businesses investing in these neighborhoods. Despite the admirable aims of this program, Opportunity Zones have had limited impact on the commu-

nity while providing more substantial benefits to investors (Theodus et al. 2020). However, the Urban Institute recommended changes that would provide a sound basis for any program designed to infuse communities with jobs and investments, such as prioritizing projects that have the most immediate economic impact on the community (such as job creation) over those that generate the most profit for the investors and seeking more support from Community Development Financial Institutions, which are private financial institutions that are dedicated to providing affordable lending to help low-income and socially disadvantaged people and communities improve their economic standing. In addition to bringing capital into poor and underresourced Black neighborhoods, these investments can also ameliorate the conditions that foster criminal activity. Advocates of “placemaking” argue that unless outside investments are directed at the *causes* of a neighborhood’s problems, they will not create any sustainable change (Adebowale-Schwarte 2017).

Beyond the macro-level interventions that we have identified in this section are other fundamental structural interventions that represent alternatives to traditional policing. These alternative approaches may not only better address the problems of equitably policing but also create systems of support to better serve the public.

MEGA-LEVEL PROCESSES AND BIAS IN POLICING

Mega-level processes in our framework are called the Great Bard. We chose this personification because mega-level processes are the stories and narratives that are told within and about a culture that justify and perpetuate inequities across groups. These stories are deeply embedded in the culture, and they influence what is idealized within a society. Beyond the interplay of history and the interwoven forces that work across organizations, there are the stories told about why the systems that a society has built are good, inevitable, or necessary. These stories can, for example, lead to a significant overestimation of the progress that the society is making in achieving racial equality (see Torrez et al. 2024). Such mega-level pro-

cesses can also include the stories and narratives about race and crime that pervade daily life, which serve to justify institutional and cross-institutional treatment of marginalized groups that obscure discriminatory outcomes.

Cultural Influences

The narrative that only police can prevent crime is an oft-repeated bipartisan mythology that perpetuates the dominant role of policing in the lives of people of color (Najdowski and Goff 2022; Prowse and Goff 2023). As Eduardo Bonilla-Silva (2021) illuminated in his influential book *Racism without Racists*, despite frequent rhetoric in support of equality, White people’s actions are substantially determined by practices, beliefs, arguments, and rationalizations that account for and ultimately justify racial inequities. However, individuals, organizations, and institutions may not be aware of the unfair impact of these beliefs, practices, and formal policies because they are normative and perceived as appropriate and effective (for example, system justification; Jost 2020).

At a mega-level, cultural stories and narratives articulate a wide variety of beliefs, ideologies, and rationalizations—many of which may be conflicting (for example, principles of equality, in which outcomes are shared equivalently, versus equity, in which outcomes are determined proportionately based on investment)—for individuals, organizations, and society to adopt. The nature of cultural narratives limits the choices available to individuals and collectives, but the motives and goals of individuals and collectives, which may be explicit or implicit (Desai, Paranamana, et al. 2023), influence which of the beliefs and ideologies are adopted or applied in particular social contexts.

With respect to race, two such available but conflicting principles are multiculturalism, which involves recognizing and respecting the presence of multiple cultures, and colorblindness, which is the belief that it is both possible and desirable to treat people without regard to their race. While colorblindness may sometimes be endorsed out of genuine desire to promote harmony and ultimately achieve equality, in practice it often exacerbates intergroup tensions and generally reinforces group hierarchy as it cloaks subtly biased interpersonal behav-

iors, organizational practices, and societal policies to perpetuate inequity across groups (Neville et al. 2013; Yi et al. 2023). Of direct relevance to policing, an extensive ethnographic study found that while the policies and practices of a police department reflect “racial governance” that produces racially disparate outcomes in policing, there is “widespread denial or racism in officers’ accounts of phenomena ranging from segregation to police shootings. Officers instead offer colorblind interpretations of social problems and narrate their work in relation to geographic and functional subdivisions, policies, and laws” (Gordon 2024, 3377).

There is relatively little quantitative work on the relationship between these societal-level stories and actual policing. A time-series analysis reveals that across the period from 2014 to 2019, there was a systematic, positive relationship between stories in eight major news outlets including violent political rhetoric, defined as “language that defames, dehumanizes, or threatens opponents” (Zeitoff 2023, 5), and subsequent police violence resulting in the death of a community member (Nugent and Khalil 2024). Although this research did not test for differences related to the race of the victim, given the statistics on racial disparities involving victims of police violence and the impact of such violence on Black community members, it is very likely that the impact of violent political rhetoric has a particularly negative impact through policing on Black people.

Additional evidence linking societal-level stories and policing appears in emerging literature on “copaganda” (for example, Rackstraw 2023) that harkens back to the days of W. E. B. Du Bois (1935). In this literature, the term copaganda refers to the tendency of both news and entertainment media to communicate stories that assume the necessity, virtue, and effectiveness of police and their tactics. This “positive police PR” can make it more difficult to gain political momentum for resisting police expansion—or even challenging the status quo.

While narratives and stories have historical roots and are firmly entrenched in culture through transmission across multiple generations or widespread endorsement of political, economic, and social leaders, work on copaganda

highlights the dynamic and potentially malleable influence of mega-level processes. For example, with respect to policing, mass media, in the form of reality-television shows that portray police officers as protagonists, highlight a particular narrative of police-community relations that can change the nature of that relationship. In particular, police departments featured in these shows demonstrate a significant (20 percent) increase in arrest rates, but mainly for low-level victimless crimes (see Rackstraw 2023). Media influence of this type represents a form of copaganda that could possibly have broader impact on policing and public support for policing in ways that obscure, tolerate, or support discrimination in policing.

Although the body of work, and particularly quantitative research, on mega-level influences on policing is currently more limited than investigations at other levels of analysis, research in political science (for example, Huddy and Khatib 2007) and cultural psychology (for example, Hammack 2008; Markus and Kitayama 2014) does suggest there are fruitful methodologies available to trace the relationships among cultural narratives, institutional norms, and individual behaviors relevant to policing.

Mega-level Interventions

The current scholarship surrounding changing cultural narratives is highly theoretical. While public opinion polling can observe societal-level changes in attitudes (for example, the rapid decline in antigay attitudes in the United States; Kumar et al. 2023), it is theorists like Marx who tend to focus scholarly efforts on how one might intervene on cultural narratives. But this need not be so. Attitudes toward policing changed rapidly in the wake of the murder of George Floyd and, while those changes were transitory, particularly among White people (Williams 2021), there is still a broader awareness of racial disparities and likely discrimination in policing than before 2020. Because attitude change is an area of expertise among psychologists, narrative psychology is an emerging subfield (László 2008), and both political scientists and communications theorists devote significant time to thinking about political narratives. Similarly, the work of political philosophers (for example,

Adorno 2019; Stanley 2015) has long focused on how political language produces cultural changes on the way to group-based domination, with the work of Adorno giving birth to a generation of political psychologists and sociologists interested in the overlap of personality and the endorsement of political systems. The recent rise of moral psychology (for example, Dunlea and Heiphetz 2021; Mosley and Heiphetz 2021) provides a model for formally testing these largely philosophical hypotheses. In other words, it is possible to turn the tools of behavioral science toward the problems of structural racism. In the interim, it is at least important to recognize that this level of sociopolitical organization exists and to identify it as a force that potentially influences racial discrimination in policing.

MOVING FORWARD

The evidence of racial disparities in policing in the treatment of Black people relative to White people is robust and persistent. As we documented earlier, Black people are more than twice as likely as White people to be the victims of fatal shootings and the targets of nonlethal force by police officers; they are also significantly more likely to be stopped and frisked as pedestrians and stopped and searched as drivers. Substantial disparities also exist for members of other minoritized groups (for example, Latine individuals) relative to White people.

However, such disparities, no matter how strong or consistent, are not direct evidence, in themselves, of discrimination in policing. There are multiple factors involved that operate across different levels of sociopolitical organization. In this article, we introduced distinctions across five levels of sociopolitical organization—the nano- (intrapersonal), micro- (interpersonal), meso- (organizational), macro- (institutional, pan-organizational), and mega- (cultural) levels—for understanding the diverse processes that can affect racial bias in policing. We use this framework as a taxonomy for organizing the vast and rapidly expanding multidisciplinary literature in this area and structuring our review of that literature. Our review of the relevant research at each level strongly implicates the roles of nano-, micro-, meso-, macro-, and mega-level processes in

producing racial inequities through discrimination in policing.

The challenge for achieving equity in public safety is that racial bias in policing operates at all these levels. Even if it were possible to make all police officers racially unbiased (nano-level), the existence of organizational (meso-level) biases, systemic (macro-level) biases, and cultural narratives that normalize bias (at the mega-level) that have effects in the absence of animus or even awareness, there would continue to be racially inequitable outcomes in policing that disadvantage Black people. Conversely, if systemic, organizational, and structural biases were eliminated but individual racism permeated policing, Black people would also continue to be targets of discriminatory policing. Efforts to address racial inequities in policing thus need to combat biases at each level in a comprehensive and coordinated way.

Understanding these dynamics more deeply can guide the development of interventions that not only address biases in policing associated with processes at each of the different levels of sociopolitical organization but also have broader impact by targeting unique multilevel dynamics of racial bias in policing. While research at each of the separate levels suggests theoretically grounded interventions that can potentially reduce racial disparities in policing, these efforts often encounter obstacles to implementation. They may also produce backlash. For example, antibias training—an intervention aimed at changing intrapersonal, nano-level processes—reliably increases knowledge and understanding of racial disparities but has not been shown to have an enduring impact on police officer behavior. Antibias training efforts may also produce reactance among participants and encounter political resistance. Increasing the priority and practice of procedural justice with a police agency or department—a meso-level intervention—has been shown to reduce officer use of force and improve police-community relations. However, organizational culture change is difficult to achieve and sustain, particularly when the aim of the change is at odds with traditional (institutional) police culture. Hot-spots policing—a macro-level strategy—can reduce crime within

a specific area, but expanding police activity may cause community backlash and harm to community members who have unnecessary negative encounters with the police. Important questions thus remain about how to best understand and address unfair racial disparities in policing.

In the remainder of this last section, we discuss two potential ways to move forward to address the significant and persistent problem of racial disparities in policing. We first discuss why and how policing, and the problems of policing, need to be understood in the context of all five levels of sociopolitical organization, and the need to adopt an interdisciplinary and multidisciplinary approach. Then, we consider how policing in the United States can be reimagined to be not only more equitable but also more effective.

Multilevel Perspective

We organized our review around the research literatures associated with the processes frequently studied at each of five levels of sociopolitical organization. Although this approach maps the empirical findings in a comprehensive way, pursuing the issue of racial disparities, and potential racial discrimination, in policing separately at each level is limited in illuminating the complex dynamics involved that not only operate within each level but also potentially interact across levels of sociopolitical organization. Thus, moving forward, we recommend a predominantly multilevel analysis of the issue.

A multilevel analysis is also inherently multidisciplinary. We reviewed work conducted by criminologists, economists, legal scholars, political scientists, psychologists, and sociologists with a common interest in racial bias in policing. Multidisciplinarity offers a greater range of resources than work within a single discipline; it draws simultaneously on the knowledge base, methods, and insights from different scholarly disciplines. In fact, as psychologists, we acknowledge that the individual-level approach of psychology is inadequate to fully understand these racial disparities.

Disciplinary boundaries can present barriers, however. Scholars from various disciplines adhere to different methodologies, theories,

disciplinary concepts and language, and publication standards that make integrated research perspectives challenging (Ghamgosar et al. 2023). These obstacles often limit analysis to describing the processes at multiple levels as parallel ones, much as we partitioned the current review. Nevertheless, racial disparities in policing are likely grounded in processes, potentially racially discriminatory ones, at multiple levels *jointly*, for example in complementary or reciprocal fashion. We therefore propose that the five-level framework we presented be further developed to create a conceptual model of how processes at these various levels combine to create, sustain, and justify racial disparities in policing.

As we noted when we introduced this framework, despite the linear organization of these levels of analysis, we do not consider either extreme, the intrapersonal, nano-level (in a bottom-up way) or the cultural, mega-level (in a top down fashion), as distinctively foundational. Instead, each level in the framework can have influences that are sufficient to produce and sustain racial biases. Racial bias can be the result, independently, of individual racial animus expressed in thought or action (nano- or micro-level influences) or through intraorganizational or interinstitutional policies and practices (meso- and macro-level processes) or embedded in cultural narratives (mega-level processes). However, it is likely that processes at these different levels operate jointly in a variety of different ways. For instance, racial stereotyping—generally and in the context of policing—occurs because of the tendency of humans to develop mental shortcuts (heuristics) and to socially categorize individuals to cope with the overwhelming volume of information they must process. Whereas these nano-level processes create a psychological tendency to form stereotypes of salient groups, cultural narratives shaped by historical and contemporary system-justifying narratives (mega-level processes) largely determine the specific content of these stereotypes. Through interpersonal interaction and socialization (a micro-level process) and mass media (a mega-level process), these stereotypes are transmitted and adapted over time as societies evolve.

Indeed, research on policing often does con-

sider how influences at different levels of sociopolitical organization combine to influence racial bias in policing. For example, empirical research that has adopted a multilevel perspective (Farrell 2024) has examined the effects of the race and gender of a person stopped by a police officer (micro-level influences) in conjunction with the characteristics of the neighborhood in which the stop occurs (a macro-level factor) on whether or not the police officer engages in further action (frisking, searching, summoning, or arresting the person). That research showed that the officer was more likely to pursue further action after the stop when the person was a man rather than a woman, the person was Black rather than White, and the stop occurred in a more predominantly Black area. However, a cross-level analysis revealed significant interactive effect. Whereas Black people stopped were generally more likely to be subjected to further action than were White persons, Black persons who were stopped were especially likely to be frisked, searched, summoned, or arrested when they were stopped in neighborhoods that had more White residents, suggesting that they were perceived as more “out of place.” This multilevel analysis thus provides important information beyond and different from the results of testing each predictor separately.

We offer additional concrete examples of the methodological, theoretical, and practical value (with respect to intervention development and assessment) of cross-level analyses of racial disparities in policing.

Methodological Refinement

One of the major methodological challenges for understanding the bases of racial disparities in policing involves the issue of directly establishing the causal effect of race, which is essential for determining the impact of racism in policing (National Academies of Sciences, Engineering, and Medicine 2018). In field studies, typically conducted by behavioral science researchers in disciplines other than psychology, techniques such as benchmarking and time-series analysis are often used to test hypotheses about the role of discrimination in racial disparities in policing. However, depending on how a researcher implements these techniques,

they may not produce valid inferences about the causal role of discrimination (Neil and Winship 2019).

Traditionally, particularly in psychology, the gold standard for establishing causality in research has been an experiment that tests the impact of a manipulated independent variable on the outcome of interest and controls for other influences in the situation. For both ethical and practical reasons, such direct experimental work in the naturalistic context of policing is relatively rare. Much of the experimental evidence in psychology we have described, such as the shooter bias, has involved simulations of police-relevant behaviors using either participants from the general population or police officer participants. While these experiments help identify underlying causal processes (for example, the role of individual-level biases on perceptions of threat based on the race of another person), the external validity (the generalizability) of such findings is limited. Quasi-experimental tests (for example, the veil of darkness paradigm, which shows that racial disparities in police stops of motor vehicles are significantly smaller at night, when it is more difficult for officers to discern the race of the driver, than during daylight) are thus particularly valuable because they complement the findings of laboratory-controlled research on bias and discrimination in critical ways.

Multilevel analysis can also help, methodologically, to distinguish various types of influences that could account for the same policing outcome. For instance, the finding related to structural-level processes that the greater incidence of police stops in neighborhoods that are predominantly Black than in those that are predominantly White (for example, Fagan et al. 2016) could be a consequence of individual-level police bias, greater police racial bias, or officers’ experiences with more crime in the area (Braga et al. 2019). Time-series analyses considering individual-level factors (for example, increases in personal bias or perceptions of threat) and location-related factors (for example, changes in neighborhood composition or crime rate) could help disentangle potential causal influences for such associations. Determining the nature of causality is essential for

designing, implementing, and assessing interventions to reduce racial disparities in policing.

In addition to further refinement of the methodologies used to validly assess the influence of discrimination on racial disparities in policing, the triangulation of findings from less than perfect paradigms across levels of analysis and disciplines with appropriate caution can still contribute positively to theory development and testing, as well as help guide practical interventions.

Theory Development

Considering multiple levels of sociopolitical organization also generates productive theoretical developments. Here we offer one such example. Ryan Hübert and Andrew Little (2023, 2828) describe a model of how police officers “form beliefs using crime statistics but do not properly account for the fact that they will detect crime in more heavily policed communities.” The effect can be understood as an example of the nano-level fundamental attribution error (Ross 1977), in which people tend to overestimate the influence of others’ actions on the personal characteristics of the actor (dispositional attributions) and underestimate the influence of the context in which the action occurs (situational or environmental attributions). These dispositional attributions, in turn, guide the subsequent perceptions of community residents, generating greater suspicion of criminal activity by police officers (a micro-level process) and produce organizational responses, such as intensified policing in specified locations (a meso-level response). This intensified policing can then yield greater evidence of criminal activity, not because of any increase in the individual propensity for such activities by community residence, but because more incidents are detected by greater police surveillance. This process then adds to the body of crime evidence that police officers use to form their beliefs about racial differences in crime. The researchers conclude, “This creates a feedback loop where officers over-police groups that they (incorrectly) believe exhibit high crime rates. This inferential mistake can exacerbate discrimination even among officers with no animus and who sincerely believe that disparities are driven by real

differences in crime rates” (Hübert and Little 2023, 2828).

We propose that explicitly structuring conceptual analyses around the premise that distinct forms of bias reside in different levels of sociopolitical organization and that these influences combine in particular ways can help provide more theoretical coherence to the existing literature and offer new insights for emerging works. Given that processes at one level may combine with processes at any other level (or multiple levels), one priority for the task of developing this conceptual framework would involve empirically identifying which combinations are most influential in practice in a given context—in this case, the context of policing. Understanding these dynamics more deeply can inform the development of interventions that not only address biases in policing associated with processes at different levels but also have broader impact by targeting unique multilevel dynamics of racial bias in policing.

Intervention Development

Both theoretically and practically, not only does simultaneous consideration of different levels of sociopolitical organization promote a more comprehensive understanding of the dynamics underlying racial disparities in policing, but it can also facilitate more expansive consideration of solutions. Our analysis of conditions that tend to increase the likelihood of racially discriminatory policing through individual-level processes (see also Pryor et al. 2020) suggests changes in practice or policy to reduce racially biased misconduct by police officers at the individual level. As Jillian Swencionis and Phillip Atiba Goff (2017) note, limiting officer discretion—for example, by clarifying conditions under which use of force is permissible—would be an important step for reducing racial discrimination in this area. This can be accomplished through more meso-level changes in policies within a specific police department (meso-level) or at a broader, macro-level. As an example, since the murder of George Floyd in 2020, twenty states have modified their use-of-force standards, typically clarifying that deadly force is justified only as a last resort after exhausting all nonviolent options (Subramanian and Arzy 2021).

As we previously discussed, a large body of research indicates that, at the individual level, police officers' stereotypes of Black people (and other minoritized groups) and other explicit or implicit biases systematically contribute to racial disparities in police stops and searches and in nonlethal and lethal use of force. Traditionally, the recommended solutions for these effects have also been individual-level, such as improving selection procedures or having officers participate in various forms of antibias training. However, the scholarly evidence indicates that there is not a specific type of training intervention that can reliably reduce implicit bias and possibly even explicit bias in an enduring way (Greenwald et al. 2022; Paluck et al. 2021). A multilevel approach suggests promising alternatives to reducing discriminatory behavior—an ultimate goal.

We considered the role of norms as a meso-level organizational process. Norms are the informal rules and practices that define how individuals should behave within an organization. Whereas stereotypes and attitudes are well-established habits of mind that are difficult to change because they are connected to multiple aspects of social networks and attempts to change them can create backlash, people readily adapt their behaviors to the norms of various situations they encounter. People automatically activate normative guidelines in these contexts, and these norms reliably shape actions both because people are motivated to behave in accordance with these guidelines as members of the group sharing these norms and because other members of the group will enforce these norms when an individual's behavior deviates from these guidelines.

We acknowledge, though, that there are often conflicting norms in a particular situation. For instance, norms established within particular police agencies or departments for other officers to intervene to prevent unjustified or excessive use of force may be at odds with traditional norms for policing as an institution that emphasizes strong loyalty and mutual support among line officers (Silver et al. 2017). Formal policy changes may therefore be needed to achieve the desired effect (Subramanian and Arzy 2021). For instance, since the murder of George Floyd in 2020 by officer Derek Chauvin

while three officers watched or assisted, twelve states and the District of Columbia have instituted laws declaring that police officers are responsible for intervening when they observe cases of excessive or illegal force or misconduct. Penalties for not abiding by these policies range from decertification of officers to criminal liability. Even in the absence of state-level action, agencies and departments are establishing new policies. In the past three years, twenty-one of the nation's one hundred largest police agencies have adopted "duty to intervene" policies (Subramanian and Arzy 2021).

Intervention Assessment

A multilevel approach offers a more valid cost-benefit analysis for assessing impact of interventions. For example, whereas the impact of increased police stop and frisk activity is frequently assessed in terms of crime rates in a particular location—one goal of such initiatives—the impacts of such actions (for example, on the mental and physical health and perceptions of police legitimacy of community members) are also individual-level outcomes relevant to the longer term and broader effectiveness of policing. The limited impact of stop and frisk interventions for reducing crime may be substantially outweighed by the costs of community health and erosion of perceptions of police integrity (see Petersen et al. 2023). Moreover, if researchers use a broader lens when considering the impact of police interventions, they can stimulate new, important issues to be considered empirically and in application. For instance, Braga and colleagues (2019, 545) observe: "The existing body of scientific evidence on proactive policing programs generally does not consider how these crime reduction and community perception impacts might vary with the racial composition of communities, the police department, and police leadership." Understanding how various factors that have been typically studied within a particular level of analysis operate jointly to impact intervention effectiveness is essential for developing and implementing new strategies for reducing racial discrimination while improving the effectiveness of policing.

A multilevel approach to understanding and addressing racial discrimination in policing in-

volves increasing equity and improving the effectiveness of policing as presently conceived. The model of policing in the United States today is anchored in policing tradition and in its current structure. Therefore, even with a more comprehensive understanding of the factors contributing to racial disparities in policing, change may essentially be only incremental. Institutions and organizations, particularly when conditions of threat are involved, tend to resist change through both informal and formal means (for example, through system-justifying ideologies; Jost 2020). New models of policing may be needed to address the challenges of policing in society now and in the future.

Policing Reconceived

While arguments for fundamental change in policing as an institution (for example, “defund the police”) have generated substantial political debate and conflict, many scholars have proposed ways of re public safety in the United States to address the important issues raised both by police officers and the public. Indeed, police officers have long asked to be relieved from the responsibilities of addressing a range of challenges (for example, handling situations involving substance abuse, mental health, and problem behaviors in schools) they regularly face. Furthermore, given how much training is involved in dealing with any one of them, it seems unreasonable to expect police officers to be adequately trained for *all* of them as well as to be prepared to deal directly with a range of criminal activities, including extreme circumstances such as those involving active shooters. So, if police are ill prepared for the range of responsibilities they are asked to perform, and the public does not trust them to do the job, what can be done?

This quandary is why the explosion of alternatives to policing has continued since 2020 (Center for Policing Equity 2024). Yet, because many of these efforts are so new, it will be some time before the science is settled about which ones provide the highest return on investment, what the minimum necessary dosage of these alternatives is to improve public safety, and what the sequencing of investments might look like to maximize safety and minimize the bur-

dens of our systems of punishment—especially on Black communities.

Tailored Responsibilities

Tom Tyler (2021; see also Kramer and Remster 2022) observes that, traditionally, the focus of policing in the United States has been on controlling reported crime through force and heightened risk of being caught and punished. A major consequence of this approach is that police officers are primarily “trained in one skill set. They learn how to deploy force to compel compliance” (Tyler 2021, 1393). One proposed way to make policing more equitable is to have resources be reallocated to social services and allow police officers to focus more narrowly on controlling serious crime. However, this work acknowledges questions about the feasibility of that approach given the resources needed to create an adequate social service infrastructure to relieve police officers of these responsibilities.

Legitimacy-Based Policing

Tyler (2021, 1398) also proposes an alternative approach: that policing be more fundamentally reimagined around the “question of how people would like the police to deal with social order in their community.” Central to this process would be a shift in policing from a force-based style to gain compliance to a style oriented toward building trust and confidence in the community by establishing legitimacy through procedural justice practices (Chan et al. 2023). When people view the authority of police as legitimate, they more willingly accept and follow police officers’ directives and abide by the laws they enforce. This model of policing promotes the development of police-community partnerships to prevent crime while addressing structural factors that foster crime by establishing “a climate of reassurance within communities that promotes their social, economic, and political vitality” (Tyler 2021, 1388). However, such efforts to improve the legitimacy of policing in the eyes of Black people (and members of other minoritized groups) need to acknowledge that “policing has been seen as racial terrorism in too many communities for too long” (Goff 2021, 678) and that helping communities heal from the harms of polic-

ing (see Prowse and Goff 2023) is a key step in achieving the partnerships and trust Tyler envisions.

*Asking the Right Questions
About Race and Policing*

While Tyler's recommendation for reconceiving policing promises more effective and equitable policing, we offer another perspective. Rather than framing the problem as one of how to change bad police officers into good ones or how to make policing that is limited in effectiveness more effective, it is important to recognize that policing itself is often the problem. Consequently, reforming it is not necessarily the solution. We do not necessarily advocate for the abolition of policing but rather urge a major reimagining of public safety—one in which policing plays a different, less intrusive, and more appropriate role in the lives of citizens.

Gwen Prowse and Phillip Atiba Goff (2023, 528) ask, "Why do police respond to mental health crises rather than healthcare workers? Why does an armed first responder issue traffic violations? What are the consequences of those policy choices?" These questions are basic ones to consider when evaluating policing today. Their answers suggest important ways that policing might be reimagined. For instance, police officers are currently the most common first responders to mental health crises. In some cases, this seems unavoidable, as mental health crises can involve weapons and violence. But in many—perhaps the majority—of cases, behavioral health professionals are more skilled and thus would be more effective at intervening to protect public safety. Also, the argument behind police giving speeding tickets is that unsafe behavior on the roads is a public safety hazard. Why, then, are some jurisdictions able to mail tickets to speeding motorists? And what evidence is there that only police keep our streets safer?

Two traditional elements of policing, crisis intervention (which includes responding to mental health crises) and low-level traffic violations enforcement, have been the focus of interventions for reconceiving policing. Several jurisdictions, including ones in cities like St. Louis and Oakland, have instituted policies that include a range of non-police crisis re-

sponders. In addition, the CAHOOTS (Crisis Assistance Helping Out on the Streets) model is growing in popularity across the United States. CAHOOTS is a mobile crisis intervention program that, in coordination with police departments, sends teams of professionals to respond to calls indicating a need for services related to mental health. The program thus offers an alternative to police officers intervening in noncriminal situations by using appropriately trained personnel. Also, an increasing number of jurisdictions are asking these questions and seeking to limit—or eliminate—police from low-level traffic enforcement (for example, for broken taillights or expired registrations). For example, several major cities (for example, Philadelphia and parts of Los Angeles) have recently ended low-level traffic enforcement by police, and several states (including California, Connecticut, and Washington) are currently considering such legislation.

The intended impacts of these new programs are broad. They reduce the demand on police officers, relieving stress and allowing more efficient and effective deployment of personnel tailored to their professional training. These programs also reduce exposure to the kinds of complex situations that can lead unnecessarily to inappropriate police behavior (such as excessive use of force) or to racial and ethnic discrimination in policing. The intent of legislation that limits police involvement in low-level traffic enforcement in Connecticut, for example, is to reduce racial and ethnic inequities relating to these policing incidents and the escalation of such stops into these incidents (Chacko 2024). However, we are not yet aware of definitive findings concerning the effectiveness of these changes related to supporting policing with additional mental health services (for example, the CAHOOTS program) or relieving police from pursuing low-level traffic violations.

A major consequence of using "police" as the answer to questions about who should respond to a broad range of public safety situations, including those that police officers are not fully equipped to address, is that an intrusive police presence becomes a problem in itself. The core question guiding the future of policing from this perspective thus becomes,

“When is policing the right tool, and when is it the problem?” (Goff 2021, 677). If the rules of policing have always unfairly produced group-based disparities that reinforce social hierarchies, and individual officers are not free of individual risk factors—in fact, they are worse for officers (Pryor et al. 2020; Swencionis and Goff 2017)—and few, if any, trainings are effective in combating individual biases, are there any conditions where police *are* the best response we can imagine for communities in crises? While this approach inevitably leads to a more limited role for police in society—when it is the right and best tool—the objective is not to punish police as an institution but rather to prepare police officers, who are currently overburdened with multiple demands, to be better equipped to meet the challenges facing officers and society, to serve equitably, and to prioritize the skills that police officers need most. Moreover, considering the multilevel impacts of policing in its current form, the answer to the question of whether policing is the right tool requires full consideration of the question, for whom?

While this may seem a radical framing for some, the question of where to solve problems with policing is, again, as old as the profession, and concerns about the likely problems with using an armed force domestically to regulate public safety date back to the first Western police institutions. In other words, questioning whether to use police is no older nor less fundamental to the project of formal policing than the question of how best to prevent their excesses. And perhaps returning to these formational questions will help provide answers that have been missing for the past two centuries of less-than-stellar results of the experiment of providing organized policing without unjust outcomes for those vulnerable communities whose safety is most precarious. More importantly, it forces us to ask the question: if two hundred years have left us without justice in this first stage of the criminal legal system, was it ever designed to do otherwise? We ask this question in good faith, understanding that a failure to ask it may seem to belittle the injustices shouldered on the backs of Black and Brown communities over the past two centuries.

CONCLUSION

This article has explored the role of the behavioral sciences in determining how racial biases—in individual police officer attitudes, stereotypes, and behavior; organizational and institutional policies and practices; and societal and cultural influences—can produce racially and ethnically inequitable outcomes. There are substantial and persistent racial and ethnic disparities in multiple elements of policing, including, for example, pedestrian and motorist stops and searches and the use of nonlethal and lethal force. We note, however, that these disparities, which are differences in frequencies or rates of outcomes, are not necessarily reflective of unfair discrimination. Determining the role of unfair racial or ethnic discrimination is a challenging process given the complex, multidetermined nature of policing outcomes. We have therefore proposed and applied a multilevel analysis framework for understanding the causes of racial and ethnic disparities and for developing interventions to address inequities.

While other articles in this special issue also posit multiple levels of analysis, the framework that we propose delineates five levels: nano, involving intrapersonal processes (for example, stereotyping); micro, relating to interpersonal processes (for example, potentially reciprocal responses between a police officer and a community member); meso, including norms and formal policies within a particular organization); macro, representing pan-organizational or institutional influences that shape outcomes); and mega, reflecting cultural-level narratives or ideologies. Inequities are often the result of the confluence of influences across more than one level. For instance, negative racial stereotyping (a nano-level process) may lead to a higher rate of unjustified pedestrian stops and searches of Black people when department policies (a meso-level influence) permit greater officer discretion or less documentation of activities, particularly in neighborhoods in which residents are lower in socioeconomic status (a mega-level influence). Such multilevel analysis is also inherently multidisciplinary, bridging theoretical perspectives across the behavioral sciences. Methodologically, triangulating effects across different methods (for example,

laboratory research, analyses of administrative data that may be limited, or statistical analyses controlling for variables representing alternative interpretations for disparities) can increase confidence in concluding that a significant amount of disparity represents policing inequities that are the result of racially or ethnically discriminatory policing.

Understanding the complex dynamics that underlie racial and ethnic disparities (and potentially inequities) in policing is also critical for developing appropriate, coordinated, and effective interventions to address the consequences of racial and ethnic biases and unfair discrimination in policing. Inequities in policing will result even if all officers act in unbiased ways, but the policies and practices of institutions, which may appear race-neutral, have inequitable negative impacts on members of minoritized groups or cultural narratives that justify discriminatory treatment. If policies are fair but police officers are biased, the scales of justice will still be unbalanced. Successfully addressing racial and ethnic bias and discrimination in policing is important because of the substantial negative and inequitable psychological, physical, and behavioral impact such discrimination has on its victims, on the communities whose members identify with victims, and, as the response to the murder of George Floyd vividly revealed, on the core values of society endorsed by citizens across all races and ethnicities.

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