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*Editors*

and let thy feet  
millenniums hence  
be set in midst of knowledge

# Social Psychology in Action

Evidence-Based Interventions  
from Theory to Practice

 Springer



# Implicit Prejudice

# 11

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and Debbie S. Ma

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## Introduction

Soccer spectators taunt black players with monkey calls and bananas.<sup>1</sup> Women on corporate boards are ridiculed by their male colleagues for allegedly being too chatty.<sup>2</sup> And politicians in high office refer to immigrants as criminals and rapists.<sup>3</sup> These examples of prejudice are contemporary, but the issue itself is a fundamental and all too common aspect of human interaction. As in these examples, prejudice can lead to deliberate acts of discrimination. People choose to derogate outgroups to elevate their ingroup's status and their personal self-esteem (Hogg & Abrams, 1990; see Scheepers & Ellemers, Chap. 9); people intentionally denigrate an outgroup to preserve their ingroup power (Sidanius & Pratto, 1999) or in a calculated political move use an outgroup as a scapegoat for societal ills (Glick, 2002). However, beyond such deliberate acts, where prejudice serves as a means to a particular end, group attitudes and stereotypes may influence judgment and behavior without any intent to discriminate or treat members of one group

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<sup>1</sup><https://www.bbc.com/sport/football/27363859>

<sup>2</sup><https://www.nytimes.com/2017/06/13/technology/uber-sexual-harassment-huffington-bonderman.html>

<sup>3</sup><https://www.washingtonpost.com/news/post-politics/wp/2015/06/16/full-text-donald-trump-announces-a-presidential-bid>

different from those of another group. For example, white observers perceive black faces as angrier than white faces with the same expression (Hugenberg & Bodenhausen, 2003); and they more readily identify an ambiguous object as a gun when it is in the hands of a black rather than a white man (Correll, Wittenbrink, Crawford, & Sadler, 2015). They do so even when motivated to be accurate, at times not even knowing that the target person's group membership influences the outcome. This kind of *implicit* bias is usually subtle. It pales in comparison to the deliberate bigotry we cited at the beginning of this paragraph. But implicit forms of prejudice can nevertheless have significant consequences, such as when law enforcement officers must decide whether an encounter is potentially hostile and requires the use of deadly force.

In this chapter, we provide an introduction to implicit forms of prejudice. We begin by defining prejudice and its related constructs, stereotypes, and discrimination. Next, we explain how prejudice may implicitly influence behavior and under what circumstances such influences are most likely. We conclude with a description of a research project that applies these theoretical insights to a consequential real-world problem, the influence of race on police officers' use of lethal force.

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## What Is Prejudice?

In social psychology, **prejudice** is broadly considered a negative attitude toward a social group and its members (Dovidio, Hewstone, Glick, & Esses, 2010). However, to differentiate it more effectively from related constructs, a narrower definition is usually adopted where prejudice represents the affective (or emotional) component of group attitudes. It captures the negative evaluative predisposition toward a social category and its members, the dislike felt toward the group (see Correll, Judd, Park, & Wittenbrink, 2010). **Stereotypes**, by contrast, encompass the cognitive (or belief) component of group attitudes. They consist of generalizations that associate category members

with typical and distinctive attributes. The stereotype for academics, for instance, might hold that they are smart but possess limited social skills or that they tend to be forgetful. Lastly, **discrimination** makes up the behavioral component of group attitudes. It is commonly defined as behavior toward members of a social category where the behavior occurs solely because of the target's category membership. For example, a job applicant is rejected because of her gender, despite having all the necessary credentials.

Naturally, prejudice, stereotypes, and discrimination are closely interrelated. For example, while stereotypes in and of themselves can be negative, neutral, or positive in valence, the stereotypes associated with disliked groups typically contain negatively valenced attributes. Likewise, the negative evaluation of a group may give rise to discriminatory behavior (see Christ & Kauff, Chap. 10).

### Definition Box

**Prejudice:** A negative evaluative predisposition toward a social category and its members.

**Stereotypes:** Generalizations that associate category members with typical and/or distinctive attributes.

**Discrimination:** Behavior toward category members that is directed toward them solely because they happen to be members of that category.

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## How Does Prejudice Shape Judgment and Behavior?

The characterization of prejudice as an evaluative predisposition emphasizes the distinction between prejudice and behavior. Like attitudes in general, prejudice represents an individual's inclination to act in a particular way, not the act itself. So how and when does the inclination to act turn into actual behavior? Contemporary

accounts of how attitudes shape behavior generally distinguish between three processing stages: (1) an initial spontaneous activation phase, (2) a deliberation phase, and (3) a response phase (e.g., Bassili & Brown, 2005; Fazio, 1990; Gawronski & Bodenhausen, 2011; Krosnick, Judd, & Wittenbrink, 2005; Petty & Cacioppo, 1986; Strack & Deutsch, 2004; Wilson, Lindsey, & Schooler, 2000).

### Spontaneous Activation Phase

For well-established, overlearned attitudes, evaluations may be triggered automatically, without intent, effort, or conscious awareness. Such evaluations are fast. They occur within a few hundred milliseconds. They do not require any intentional search for relevant information, but instead are the result of a passive process that is set in motion automatically by the attitude object (e.g., a group member). They may even occur without awareness. Many empirical demonstrations of such spontaneous evaluations exist for social categories that are pervasive in social interaction, categories like gender (e.g., Rudman & Goodwin, 2004), race (e.g., Wittenbrink, Judd & Park, 1997), ethnicity (e.g., Greenwald, McGhee, & Schwartz, 1998), or the elderly (Perdue & Gurtman, 1990).

### Deliberation Phase

The second stage of evaluative processing consists of a controlled memory search for relevant information. This could include prior evaluations stored in memory (“I like the English”) as well as any other related associations (“polite,” “Brexit”). What information comes to mind at this point depends on its accessibility in memory, as well as contextual factors that may highlight certain information. Importantly, deliberation requires both motivation and opportunity, the motivation to explore one’s true feelings about the issue, and to form an accurate judgment, and an opportunity to do so, to attend to the issue and be able to take the time necessary to deliberate. Otherwise any

initial spontaneous evaluation will directly impact the final evaluative response.

### Response Phase

The input from phases 1 and 2 may then shape any actual behavior. Often, these influences are explicit. That is, the response is chosen based on a deliberate consideration of the evaluative input, combined with other relevant information. For example, having concluded that I like the English, I decide to take up the invitation to visit my acquaintance in London. Or, alternatively, I might conclude that although I quite like the English and would like to visit, a visit is too expensive, or it might get me in trouble with my family which has been planning another trip instead. In either case, a response is chosen with deliberate consideration of the evaluative input.

In contrast, evaluative influences can also occur implicitly, with the person remaining unaware of the connection between evaluation and response, or at least without any intention for the evaluation to influence a response. As noted, spontaneous evaluations triggered during phase 1 may remain outside of conscious awareness. Hence, any effect such evaluations might have on a subsequent response will remain outside of awareness. In addition, the opportunity to modify spontaneous evaluations through deliberation may not be available. For example, in circumstances where responses have to be made under time pressure, deliberation may not be feasible. We will discuss these circumstances and other factors that facilitate implicit influences of prejudice in greater detail in the next section.

#### Box 11.1 Zooming In: Measures of Implicit Prejudice

Various attitude measures exist that aim to capture spontaneously activated attitudes, free of processes that take place during the deliberation and response phases of

evaluative processing. The measures generally ask respondents to make speeded, split-second judgments, and they capture response latencies and/or response errors as estimates of spontaneous evaluations (for an overview of available measures, see Wittenbrink & Schwarz, 2007). Prejudice has been one of the main domains of application for these measures – in part because the measures are meant to circumvent deliberation and therefore limit respondents' opportunities to intentionally misrepresent prejudiced attitudes when they are deemed socially undesirable.

The IAT (Implicit Association Test; Greenwald et al., 1998) is by far the most popular implicit measure of attitudes. In this task, participants classify as quickly as possible two sets of target items along two dimensions of judgment. For example, as an implicit measure of racial prejudice, the first set of items might consist of faces that have to be classified according to their race by pressing one of two response keys, labeled *black* and *white*, respectively. A second set of items then consists of clearly valenced positive and negative targets (e.g., poison, love). The task for this second set is to classify the items according to their valence, using response keys labeled *pleasant* and *unpleasant*.

During a set of critical trials, both judgment tasks are combined, and the faces and valence items appear in random order. Important for the measurement, both judgment tasks are performed using the same two response keys. Two separate blocks of trials vary the mapping of the racial categories on the response keys, so that each group label is paired once with the positive response key and once with the negative key (e.g., *black-pleasant* and *white-unpleasant* versus *black-unpleasant* and *white-pleasant*). The critical measure

compares the response latencies for these two assessment blocks. Faster responses are used as an indicator of relative evaluative preference. For example, relatively faster responses for trials that pair *white* with *pleasant* and *black* with *unpleasant* are considered to reflect racial prejudice (for a detailed review of experimental procedure and data analysis, see Greenwald, Nosek, & Banaji, 2003).

Implicit measures of attitudes, and the IAT in particular, have been criticized for their limited success in predicting actual behavior (cf., Oswald, Mitchell, Blanton, Jaccard, & Tetlock, 2013). Meta-analyses of studies linking IAT prejudice measures with discriminatory behavior indeed show the IAT to have only modest predictive validity ( $r = 0.24$ ; Greenwald, Poehlman, Uhlmann, & Banaji, 2009). However, these findings have to be seen in context. First, explicit measures of prejudice don't fare any better in predicting discrimination. In direct comparisons, they actually fare worse ( $r = 0.17$ ; Greenwald et al., 2009). Second, as we noted before, prejudice reflects merely an inclination to act. Its link with actual behavior is conditional on a variety of factors. At the individual level, overall correlations between a person's prejudice and specific behavioral choices are therefore expected to be modest. In contrast, when aggregating across many individuals, the correlations between implicit measures of prejudice and overall patterns of behavior strengthen. For example, US cities with overall higher levels of implicit racial prejudice (as measured by an IAT) show greater racial bias in police-involved shootings (Hehman, Flake, & Calanchini, 2018). Likewise, a community's overall implicit racial prejudice on the IAT predicts adverse health outcomes for its black residents (Leitner, Hehman, Ayduk, & Mendoza-Denton, 2016).

## Factors that Facilitate Implicit Prejudice

Our discussion of how attitudes influence behavior, and how such influences may occur implicitly, makes it clear that the title of this chapter, *Implicit Prejudice*, is a bit of a misnomer. Often, it is not the prejudice – the evaluative predisposition – that is implicit. It is the effect that prejudicial attitudes can have on judgment and behavior that is potentially implicit (see Moors & De Houwer, 2006). Nevertheless, **Implicit Prejudice** has become a commonly used term to describe the phenomenon, and we follow this convention here.

### Definition Box

**Implicit Prejudice:** A negative evaluative predisposition toward a social category that impacts judgment and behavior without awareness and/or intent.

### Box 11.2 Question for Elaboration

What distinguishes implicitly operating prejudice from prejudice more generally?

The potential for prejudiced attitudes to operate implicitly has important theoretical and practical implications, not the least of which is that it bears the risk of discriminatory behavior in the absence of intent or possibly awareness. Even in circumstances where people want to be fair and unbiased, they may end up with bigoted judgments and discriminatory behavior. There are a variety of factors that may promote this dissociation between intentions and actions (for additional detail, see Krosnick, et al., 2005).

## Time Pressure

We already mentioned one of these factors: when making quick, perhaps even split-second, decisions, limited opportunity exists to deliberate over

one's true feelings and the correct course of actions they imply. Therefore, under time pressure the response is disproportionately influenced by information that comes to mind quickly (Bargh, 1997; Sanbonmatsu & Fazio, 1990). That is, spontaneous evaluations are more likely to shape one's actions, even though one would reject them as being irrelevant, inadmissible, or otherwise inapplicable for the decision at hand, if given the opportunity to reflect. Hence, quick responses are more likely to be implicitly prejudiced.

## Limited Cognitive Resources

Deliberation is effortful. It requires us to maintain focus, to integrate possibly disparate pieces of information, and to separate relevant from irrelevant information. People's capacity to perform these cognitive operations is limited. Thus, doing multiple things at once interferes with people's ability to perform these operations adequately, and the response they execute may not be the one intended (Govorun & Payne, 2006; Macrae, Milne, & Bodenhausen, 1994). Likewise, fatigue and periods during the daily circadian rhythm where arousal is lowered are associated with reduced cognitive processing capacity (Bodenhausen, 1990; Ma et al., 2013). With fewer processing resources available to deliberate one's evaluation and response, the resulting behavior is more likely to be implicitly prejudiced.

## Ambiguity

Some choices are straightforward. They involve clear and unambiguous input with each piece of information pointing to the same conclusion. Other choices are more complex with conflicting and possibly incomplete information. Resolving the ambiguity as to what the proper evaluation and response should be takes additional time and effort. Moreover, spontaneous evaluations which become available early in the process may shape the interpretation of subsequent information. As a result, in situations that are high in ambiguity,

responses are more likely to be implicitly prejudiced (Bodenhausen & Lichtenstein, 1987; Correll et al., 2015).

### Lack of Motivation

People are not always motivated to deliberate their options. Mindless actions may bypass deliberation and rely solely on spontaneous evaluations (e.g., Chen, Shechter, & Chaiken, 1996; Kruglanski & Freund, 1983). In circumstances where people are less curious, or care less about the accuracy of their judgments, responses are more likely to be implicitly prejudiced as well.

#### Box 11.3 Question for Elaboration

What kinds of situations can you think of that might be especially prone to implicit influences from prejudice?

### Implicit Prejudice in Practice

We began this chapter noting that prejudice and discrimination are an all too common aspect of human interaction. In the United States, for example, a significant wage gap continues to exist between similarly educated men and women working full time in the same occupation (Goldin, 2014). Likewise minority groups in the United States face considerable discrimination in the labor market, at levels that have remained virtually unchanged for the past 25 years (Quillian, Pager, Hexel, Midtbøen, 2017). In fact, the majority of blacks living in the United States report having personally experienced unfair treatment because of their race or ethnicity (71%; Pew Research Center, 2016a).

One of the focal issues of the public debate on racial discrimination in recent years has been biased treatment in law enforcement and in particular the use of deadly force by police officers. Although the US government maintains only an incomplete database on the issue, estimates by public advocacy groups and journalists are that

1093 civilians were killed by police in 2016 (1146 in 2015).<sup>4</sup> For comparison, the total number of civilians shot and killed in Germany with a quarter of the US population was 11 in 2016 (10 in 2015).<sup>5</sup> While the US numbers are disproportionately high overall, they also show significant racial bias. Over 24% of the shooting victims in 2016 were black civilians who make up just

#### Box 11.4 Zooming In: How to Measure Bias in Police Use of Lethal Force

Earlier, we defined discrimination as any behavior toward category members that is directed toward them solely because they happen to be members of that category. In other words, discrimination consists of behavior that treats members of a group differently than anyone who doesn't belong to that group. Hence, discriminatory behavior is generally defined in relation to a benchmark alternative: similar behavior directed toward people from other groups.

In determining whether officers' use of lethal force is racially biased, identifying a proper comparison benchmark proves difficult. One possibility is to compare incident rates for different groups, relative to their proportion in the population. Based on this metric, black civilians face a significantly greater risk of being shot by police than any other group in the United States. For every million black people in the United States, about six to seven are shot every year. This rate is substantially higher than the corresponding rate for whites (less than three per million) or Asians (close to one per million; The Guardian, 2016).

<sup>4</sup>Based on estimates by the British newspaper *The Guardian* which published a database for the years 2015 and 2016 of all cases of police-involved shooting deaths recorded in police records and/or public sources (The Guardian, 2016)

<sup>5</sup>Report of the German Interior Ministry Conference (Innenministerkonferenz)

One problem with this metric is that it assumes that all of these groups are equally likely to interact with police officers in ways that could eventually lead to the use of lethal force. This may not be a valid assumption. For example, relative to their proportion in the population, blacks are more likely than whites to be convicted of violent crime. They therefore may face higher base rates for situations where the use of force is at least a possibility. When benchmarking police-involved shooting incidents against estimates of the likelihood to be involved in serious violent offenses, Cesario and colleagues no longer observed racial disparities (Cesario, Johnson, & Terrill, 2018).

However, a challenge in benchmarking against race-specific base rates for criminal behavior is that estimates of such behavior themselves are potentially biased. For example, if police use race to profile potential suspects, arrest and conviction rates no longer provide accurate estimates of actual criminal activity (see Goff, Lloyd, Geller, Raphael, & Glaser, 2016). In fact, when benchmarking against area-specific estimates of criminal activity (i.e., county-specific crime rates), racial disparities in police-involved shooting deaths continue to show significant racial bias (Ross, 2015). These analyses show the risk for black civilians in some counties to be up to 20 times higher than that for white civilians, controlling for the county's crime rates.

13% of the US population (27% black victims in 2015).

The claim that police officers are prejudiced in their use of lethal force is especially disturbing, not solely because of the grave consequences to the victims but also because it has potentially corrosive effects for the perceived legitimacy of law enforcement institutions. Shootings of a minority suspect lead to mistrust among community members and give rise to conflict between the community and police. In fact, blacks in the

United States are much less likely as whites to hold positive views of local police. In a representative nationwide sample, only 14% of black respondents express having a great deal of confidence in their police department, compared to 42% among whites. Only a third of blacks believe police are using the right amount of force, less than half of the response rate for whites (Pew Research Center, 2016b; see also Weitzer & Tuch, 2004). One conceivable risk is that, in response to their mistrust, black people may alter their own behavior in interactions with police officers, becoming more belligerent, and thereby creating a vicious cycle where this belligerence leads to more severe use of force by police (Reisig, McCluskey, Mastroski, & Terrill, 2004).

No doubt, the notion that officers sworn to uphold the law would deliberately prejudice their decisions to shoot a civilian threatens the basic foundations of a democratic society. However, it is helpful to consider the circumstances under which officers have to face decisions about the use of force: in all likelihood, these are situations of significant stress to the officer, who are facing a potential threat to their own life, in uncertain circumstances that can rapidly escalate, requiring an immediate split-second decision, without much opportunity for deliberation. In other words, these are circumstances where the officers' cognitive resources are taxed, the situation is likely to be ambiguous, and decisions have to be made under serious time pressure – all factors that facilitate implicit prejudice. While we should expect officers to be motivated to be fair and accurate in their decision, the situation may indeed bias them to make choices the officers do not necessarily intend.

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### First-Person-Shooter Task

Over the past 15 years, social psychological research has examined the effect of race on shooting decisions using videogame-like simulations. One frequently employed paradigm is the First-Person-Shooter Task (FPST; Correll, Park, Judd, & Wittenbrink, 2002). The paradigm presents participants with a series of male targets, either

black or white, holding weapons (i.e., handguns) or innocuous objects (i.e., wallets, cellphones). The task for participants is to shoot armed targets but avoid shooting unarmed targets. Participants are incentivized to make accurate decisions, but they have to do so under time pressure with limited opportunity to deliberate whether the target is indeed holding a weapon or something else. The task is designed to capture any implicit influences on participants' decisions.

Specifically, the FPST presents a series of background scenes and target images over the course of many trials (commonly 80 to 100 trials). On each trial, a random number of background scenes (0–3) appear in rapid succession, each scene for a random duration (500–800 milliseconds). Next, a final background appears. This background is then replaced by a target image – an image of a man embedded in the same background (e.g., an armed white man standing in the scene; see Fig. 11.1, right panel). The resulting effect for participants is that the target seems to “pop up” in the scene. Participants are instructed to respond as quickly as possible whenever a target appears via pressing one of two keys on a computer keyboard. If the target is armed, the task is to press the key labeled *shoot*, and if the target is unarmed, to press the key labeled *don't shoot*. Importantly, across trials, the nature of the target image varies systematically. Half of the targets are armed with a handgun, and half are unarmed and instead carry an innocuous object, like a cellphone or wallet. Within each type of target (armed and unarmed), half of the images depict a black man and half a white man. To

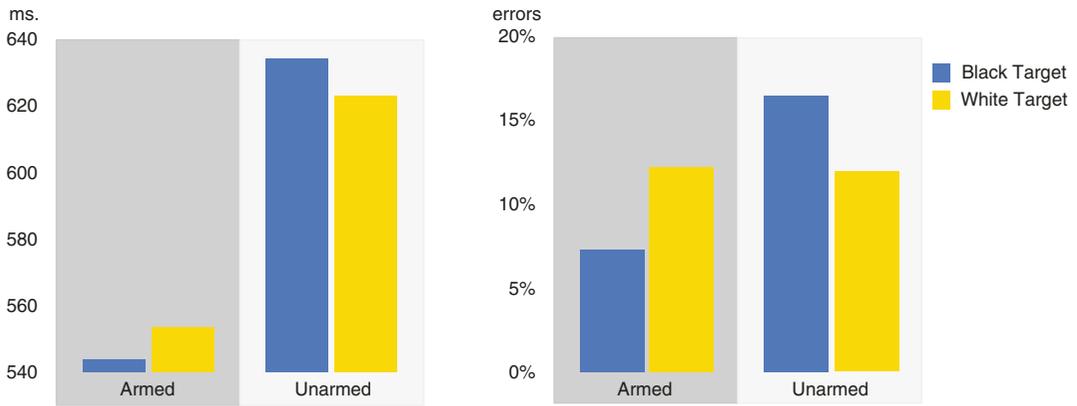
introduce time pressure and encourage fast responding, the task imposes a response window, during which the response has to be recorded (between 630 and 850 ms). Similar to popular videogames, correct responses earn points, and errors or timeouts result in penalties.

The results of some 20 FPST studies consistently show racial bias in both the speed and accuracy with which participants can make their decisions. Participants are faster and more accurate when shooting an armed black man rather than an armed white man, and faster and more accurate in their decisions to an unarmed white man rather than an unarmed black man (Correll et al., 2002; Correll, Park, Judd, & Wittenbrink, 2007; Correll, Park, Judd, Wittenbrink, Sadler, et al., 2007; Correll et al., 2015; see Fig. 11.2). Conceptually similar effects have been obtained in other labs with varying procedures and for varying ethnicities (Amodio et al., 2004; Greenwald, Oakes, & Hoffman, 2003; Payne, 2001; Plant, Peruche, & Butz, 2005; Unkelbach, Forgas, & Denson, 2008). Much of this research has been conducted with college students, but the effect has been replicated with community samples of white and black participants, as well as with police officers (Correll, Park, Judd, Wittenbrink, Sadler, et al., 2007).

The crucial point of these findings of course is that with just a few additional seconds of time, decisions are made with perfect accuracy. It is the limited time available to fully appreciate and resolve the complexity of the stimulus input and then execute the respective response that gives



**Fig. 11.1** Example target images for the First-Person-Shooter Task (Correll et al., 2002)



**Fig. 11.2** Response latencies (left panel) and error rates (right panel) for armed and unarmed targets by target race in the First-Person-Shooter Task; Correll et al. (2002)

rise to erroneous responses. Hence, the effects reflect implicit influences from the early spontaneous activation phase, where information related to the race of the target comes online. To make a correct decision, only the correct detection of the object held by the target matters. Any target-related information is in and of itself irrelevant to the decision. But it is difficult to correct for or detect this spontaneous input that is associated with the race of the target.

Several studies from our lab have explored in greater detail the exact nature of this implicit influence. We have found that it is cultural stereotypes associating black people with the concepts of danger and threat that are activated spontaneously. Temporarily increasing (lowering) the accessibility of these stereotypes exacerbates (reduces) racial bias in the FPST (Correll, Park, Judd, & Wittenbrink, 2007).

Moreover, the spontaneous danger stereotypes activated early in the decision process influence what participants conclude to see in the hands of the target. They are more likely to see a gun in the hands of a black target, while they see something

### Box 11.6 Zooming In: Perception or Response Execution?

Spontaneously activated danger stereotypes can influence subsequent responses in two principled ways. (1) They can shape the perceiver's perceptions; and (2) they can interfere with a proper execution of the response.

The latter mechanism suggests that the stereotype has a direct influence on the decision, without impacting perception of the critical object. That is, stereotypic associations with threat and danger operate as a separate input that favor a *shoot* response, even in circumstances where the object is correctly identified as a non-weapon. In this scenario, object information and stereotype are in conflict and compete with one another for influence on the response. As the stereotype comes online rapidly, it may win out when decisions have to be made under time pressure. With additional time, it is possible to reconcile the conflicting input and to recognize that the stereotype is irrelevant to the decision (Payne, Shimizu, & Jacoby, 2005). Additional time to reach a decision will only improve decision accuracy if it can be used to improve object perception. For example, if the object is visible for only a brief moment, additional time to reflect on the decision may not reduce bias (Correll et al., 2015).

### Box 11.5 Question for Elaboration

Given the research on racial bias in the FPST, what would you advise police departments do to limit the negative consequences of implicit prejudice?

innocuous in the hands of a white target (Correll et al., 2015).

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## Practical Implications

These findings on racial bias in shooting decisions help us better understand why police officers may be prejudiced in their use of lethal force. Importantly, they point to the possibility that such bias can result from implicit, unintended influences. This form of bias reflects larger societal ills that produce and perpetuate cultural stereotypes of black people as dangerous and threatening. Police officers are exposed to and influenced by these stereotypes much like everyone else. While definitely requiring intervention to eliminate the bias, the explanation contrasts starkly with the alternative scenario where police officers willingly target civilians because of their prejudice against people of color.

In the United States, following a series of police-involved shootings, community unrest, and the emergence of the *Black Lives Matter* advocacy group, police departments and government agencies across the country are pressured to take action. They have taken notice that racial bias may occur implicitly and are now spending considerable resources on possible fixes. The State of California and the US Department of Justice both independently launched mandatory antibias training programs for officers and for federal agents.

The concern is no doubt real, and interventions are sorely needed. However, whether antibias training programs, which aim to increase awareness of implicit sources of bias, are effective is entirely unknown. To date, there is no credible research available on the long-term consequences of such training interventions. In fact, they may be counterproductive in several ways.

First, deliberate efforts to avoid racial bias in decisions about the use of force may actually endanger rather than save the lives of black suspects. Several studies have shown that conscious efforts to avoid bias, for example, intentionally trying to respond in an egalitarian

fashion, can actually backfire, leading to *more* bias rather than less (Lieberman & Förster, 2000; Macrae, Bodenhausen, Milne, & Jetten, 1994; Payne, Lambert, & Jacoby, 2002).

Second, interventions that alter the way officers approach a potentially dangerous situation may endanger the lives of the officers. In a potentially hostile confrontation, officers often experience fear. Fear can be a useful cue in as much as it sensitizes to real threats in the environment. But officers who have been taught about implicit bias and prejudice may attempt to ignore their fear response. As a result, they may end up underestimating real threats in an effort to avoid the appearance of bias.

Third, antibias training may have no effect at all. Compared with the other risks, we just noted this liability may seem trivial. But in actuality it may prove to be quite harmful as antibias training ties up significant policy and material resources. For decades, the public has remained largely uninterested in the issue of racial bias in law enforcement. This has finally changed, and government agencies face pressures to intervene and address the problems. But if antibias training has no effect, the political capital and the money spent will be wasted.

Hence, the most practical implication of existing research on implicit prejudice in shooting decisions ought to be that we need further research on possible intervention strategies and their formal evaluation.

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## Important Caveats

We have illustrated how implicit prejudice can be a useful construct to better understand why police officers are biased in their use of lethal force. However, it is important to recognize that not all bias is implicit, nor is all bias necessarily psychological in origin. Implicit prejudice is only one of possibly many factors that help explain this complex issue.

First, not all officer actions necessarily reflect implicit influences. To the contrary, several of the recent shootings that received public attention

appeared to follow from deliberate acts on the side of the officer. In the case of Walter Scott, for example, who was killed in 2015 in North Charleston, SC, officer Michael Slager fired several shots from behind the victim. Scott was not threatening the officer, nor was he armed. Indeed, Slager must have known the victim was unarmed because, immediately after the fateful shots, video footage shows the officer walking over to Scott and planting a weapon in an apparent effort to justify his own actions.<sup>6</sup>

Second, although officers make individual choices and are held accountable for those choices, their actions are also influenced by institutional, structural factors that have little to do with the individual officer and his or her preferences and attitudes. For example, municipalities rely to a good extent on revenues from citations for traffic violations and similar minor legal transgressions. The effectiveness of police work is measured by statistics that capture crime and arrest rates. A city's revenue needs and arrest rates ultimately impact officer incentives – either implicitly through informal directives or patrol assignments or explicitly through formal quotas. These incentives, in turn, influence what kinds of interactions officers have with the community. Aggressive ticketing and arrest quotas are unlikely

### Summary

- Prejudice is a negative predisposition toward a social group and its members. It represents an attitude, evaluation, and inclination to act in a particular way. Those acts can reflect deliberate choices to discriminate.
- However, for well-established, over-learned attitudes, evaluations and related group stereotypes may be triggered automatically, without intent, effort, or conscious awareness. They may influence judgment and behavior implicitly,

without any intent to discriminate or treat members of one group different from those of another group.

- Factors that promote implicit influences are:
  - Inadequate time to deliberate one's actions
  - Limited cognitive resources because of fatigue or distraction
  - The ambiguity of the situation
  - Lack of motivation to act in a careful and accurate manner
- Police officers sometimes have to make important decisions about the use of lethal force under circumstances that increase the risk of implicit influences: these decisions can be split-second decisions, made in a highly stressful situation with considerable uncertainty.
- Laboratory simulations of such decisions show clear evidence of implicit bias from negative racial stereotypes that associate black people with danger: participants are faster and more accurate when shooting an armed black man rather than an armed white man, and faster and more accurate in their decisions to an unarmed white man rather than an unarmed black man.

to foster an environment of trust between officers and the community. In the absence of trust, otherwise innocuous interactions may more readily escalate into a hostile confrontation.

### Recommended Reading

Amodio, D. M., & Mendoza, S. A. (2010). Implicit Intergroup Bias: Cognitive, Affective, and Motivational Underpinnings. In B. Gawronski & B. K. Payne (Eds.), *Handbook of Implicit Social Cognition* (pp. 353–274). New York, NY: Guilford Press.

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## Guiding Answers to Questions in the Chapter

- Q1 (with Box 11.2): What distinguishes *implicitly operating prejudice* from *prejudice* more generally?
 

A1: Implicit prejudice refers to influences of prejudiced group attitudes on judgment and behavior that are unintended. Our judgment of another person may be shaped by her/his gender, without us trying to take gender into account or even knowing that gender played any role in our decision. By contrast, prejudice can have entirely explicit effects, for example, judgments that we make with deliberate consideration of our group attitudes.
- Q2 (with Box 11.3): What kinds of situations can you think of that might be especially prone to implicit influences from prejudice?
 

A2: Any situation where people have limited motivation and/or opportunity to reflect upon their reactions. Many aspects of human interaction happen mindlessly where people don't spend much effort to reflect on or regulate their behavior – like the quick exchange with the clerk at the coffee shop. In other situations, people may be motivated to make correct judgments and act in a proper fashion. Yet, the situation is such that the opportunity for reflection and deliberation is missing. For example, people may lack awareness of aspects of their non-verbal communication, precluding them to reflect and possibly correct what is being communicated. Likewise, the circumstances of the situation itself may curtail people's opportunity to deliberate their judgments and actions. When they are busy, stressed, and make decisions under time pressure, people are more prone to show implicit bias. An overworked physician at a nightshift at the ER will face greater risk in this regard than the doctor who provides written consultation on the case, following a detailed review.
- Q3 (with Box 11.5): Given the research on racial bias in the FPST, what would you advise police departments do to limit the negative consequences of implicit prejudice?
 

A3: This is a trick question. To date, existing research on the effect of race on shooting decisions does not speak to the issue of intervention. The research does make the case that implicit influences can possibly impact officer decision-making. It identifies a *potential* source for bias, one that is quite different from the alternative, where officers are deliberately prejudiced. As such, the research suggests additional opportunities for intervention. But what those interventions are, and whether they are effective relative to alternative options available in the field cannot be answered by the research to date. In fact, few studies have explicitly investigated strategies to mitigate shooter bias. It is unknown how any such effects in the laboratory might transfer to the real world.

This is an important lesson for how to properly apply scientific theory and laboratory research findings to real-world problems. The laboratory helps us to more fully understand the real world. But to fix a problem and change the world, additional research is generally required that translates predictions and findings to the specifics of a real situation. For this reason, medical interventions undergo elaborate field tests before they receive certification.

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