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APPRAISALS OF PREJUDICE AND DISCRIMINATION

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Like other daily hassles, encountering prejudice and discrimination can be stressful (Allison, this volume; Feagin & Sikes, 1994). It can cause people to feel mistreated, disrespected, and angry, and it can prevent people from meeting their goals. The frequency with which an individual identifies encounters as prejudicial or discriminatory has important implications for his or her psychological functioning: it bears directly on whether feedback about the self should be discounted or accepted, and it helps identify strategies for protecting oneself from current and future encounters with prejudice and discrimination.

The purpose of this chapter is to examine targets' perceptions of prejudice and discrimination using a modified version of Lazarus and Folkman's (1984) cognitive appraisal perspective. In 1984, Lazarus and Folkman presented a comprehensive theory of stress and coping based on a central tenant: both environmental presses and attempts to cope with those presses must be considered to fully understand the ways in which an individual defines and evaluates the environment. They called the process of defining and evaluating the environment "appraisal," and proposed two types of appraisal processes. During primary appraisal, the individual assesses whether a threat is present in the environment; during secondary appraisal, the individual assesses whether he or she has the resources to cope with the threat, should it materialize. Lazarus and Folkman (1984) focused largely

on the ways in which the secondary appraisal process influenced well-being. In the present chapter, we focus on the primary appraisal process.

Recently, Feldman Barrett (1996; Feldman Barrett & Fong, 1996) proposed an elaboration of the Lazarus and Folkman model, drawing on signal detection theory (SDT) to explain variations in the primary appraisal process. Although it was originally used as a model for understanding perceptual errors (misses and false alarms) in judging psychophysical signals, SDT has been applied to judgments in many psychological domains. Feldman Barrett and Fong (1996) argued that there are different psychological and interpersonal costs associated with misses and false alarms when applied to appraisals of threat. They suggest that people weigh the psychological costs of each type of error when making threat appraisals, thereby providing a motivational explanation for people's judgment strategies.

We suggest that deciding whether or not one has encountered prejudice or discrimination is a type of threat appraisal. A perception of threat is a subjective probability that danger to the self will develop (Milburn & Watman, 1981). In the case of prejudice and discrimination, the harm can be psychological, structural, and even physical. Psychologically, prejudice and discrimination can cause a person to internalize negative beliefs about the self. Negative beliefs may leave a person with lowered self-esteem or a damaged identity and produce a feeling that one is stigmatized (Crocker & Major, 1989). Structurally, prejudice and discrimination can restrict a person's access to opportunities or information, thereby producing a lack of personal or professional growth (e.g., Benokraitis & Feagin, 1995). Physically, prejudice and discrimination can be associated with physical attacks. In addition, prejudice and discrimination serve as a constant source of stress that can affect physical health (see Allison, this volume). Even if an event has occurred in the past, individuals might appraise the event as threatening after the fact because it presented a psychological or physical danger that they were unaware of when the event occurred, or because it presents a psychological danger when they are thinking about it in the present.

In this chapter, we examine perceptions of prejudice and discrimination as primary appraisals that are subject to misses and false alarms. Our goal is to use signal detection theory to provide a framework for understanding how people decide when they are the targets of prejudice and discrimination. More specifically, we believe our framework provides insight into the cognitive and motivational processes that underlie the identification of prejudice and discrimination. We begin by briefly reviewing components of signal detection theory and the application of SDT to perceptions of threat. We then elaborate on the specific application of SDT to perceptions of prejudice and discrimination.

SIGNAL DETECTION THEORY

Signal detection theory (SDT) was originally designed to assess an observer's behavior when attempting to detect weak psychophysical signals (Green & Swets,

1966/1974; McNicol, 1972). Considerable evidence suggests that SDT provides a good framework for investigating a wide range of human judgment behavior, including judgments of subtle, covert psychological experiences (e.g., pain, stress, fear, and memory), and judgments of ambiguous social information (Grossberg & Grant, 1978; Harvey, 1992; Swets, 1986).

SDT's most significant theoretical contribution to understanding the judgment process lies in its ability to separate an observer's actual judgment behavior into two subprocesses: sensitivity and response style or bias (Harvey, 1992). Sensitivity has been defined as an observer's ability to accurately detect sensory information when it is present and its absence when it is not present. A target's sensitivity to prejudice would reflect her or his ability to accurately detect the presence or absence of cues indicating prejudice and discrimination. Sensitivity may vary because people differ in their perceptual abilities or because of the properties of the stimulus. A stimulus' probability of occurrence, intensity, and imminence (i.e., proximity to danger) will affect its ambiguity, and therefore a perceiver's sensitivity (McNicol, 1972; Miller, 1979; Paterson & Neufeld, 1987).

In contrast to sensitivity, response style or bias is defined as the observer's tendency to favor one response over another, independent of the base rate for the stimulus. Thus, a response bias for prejudice exists when an individual judges a situation or person as prejudiced or discriminatory more or less frequently than prejudice or discrimination objectively occurs in that environment. Response bias (i.e., the placement of an observer's decision criteria) is influenced by two factors: the observer's beliefs about the base rates of the stimuli; and the goals that she or he has when making a judgment about a stimulus (Egan, 1975; Green & Swets, 1966; 1974; Healy & Kubovy, 1978), in particular, the perceived severity and consequences of a miss or false alarm (Feldman Barrett & Fong, 1996). There is no requirement that individuals are consciously aware of their response biases, and in fact they may function outside the observer's awareness (Harvey, 1992).

According to STD, the observer perceives situationally relevant information that he or she then compares to an internal decision criterion. The location of this decision criteria determines the observer's response bias (Harvey, 1992). If the available evidence is stronger than the decision criterion, then the observer will say "yes" the stimulus is present; if the evidence is not stronger than the decision criterion, then the observer will say "no" (see Harvey, 1992, and Macmillan, 1993, for a discussion of responses using continuous or probability ratings). Cognitive and motivational processes will influence where an individual sets his or her decision criterion. To determine the accuracy of the observer's perception, his or her judgment can then be compared to a stimulus criterion indicating whether the stimulus actually did occur. For a given decision criterion and stimulus criterion there are four possible judgment outcomes. A *positive hit* occurs when the observer responds "yes" and the target stimulus did appear; a *correct rejection* occurs when the observer responds "no" and the target stimulus did not appear; a *false alarm* occurs when the observer responds "yes" but the target stimulus

did not appear, and a *miss* occurs when the observer responds "no" but the target stimulus did appear.

The notion of judgment outcomes can be applied to perceptions of prejudice and discrimination. For example, an African American individual may be in a situation where he or she is barred from entering a store that is about to close, but he or she notices that the manager allows a European American to enter. In this scenario, sensitivity is indicated by whether or not the African American individual notices the incongruence at all; response bias is indicated by how the person interprets the incongruence. A person with a stringent decision criterion may not judge the event to be discriminatory. A person with a more lenient decision criterion, however, will be more likely to perceive the event as discriminatory. The extent to which a person has a stringent or lenient decision criterion (response bias) is likely to be a function of many things, including his or her previous experience with prejudice in that environment (i.e., the perceived base-rates), and his or her need to be self-protective versus accurate (i.e., the goal associated with making the judgment). The goal associated with making the judgment is strongly linked to the perceived cost of making a judgment error (i.e., the cost of a miss versus the cost of a false alarm).

In many cases, the value of the stimulus criterion is difficult to assess because the actual status of the stimulus is ambiguous and no concrete criterion for the judgment exists. For instance, in our scenario above, the accuracy of the target's judgment (hits, correct rejections, misses, and false alarms) should be determined by comparing his or her decision to the presence or absence of the stimulus criterion. We know that the store manager engaged in differential behavior toward both parties involved in the scenario, but we do not know for certain whether the store manager was actually being discriminatory toward the target individual (i.e., engaging in the differential behavior because of the race or ethnicity of the target). When there is no clear objective stimulus criterion, judgment accuracy is difficult to assess. There are strategies for creating a criterion where one does not exist, however. For example, a third party observer who is independent of the target and the store manager can be used to determine the presence or absence of the stimulus criterion. This third party observer is not necessarily "objective," but is independent of the victim-perpetrator system. Although the third party observer may have motivations that influence where he or she sets the stimulus criterion, they are not the same motivations as those of the perceiver (which constitute bias). Thus, the actual absence or presence of the stimulus cue is decided by an external source; it is ambiguous and probabilistic, but the relativity is taken out of the hands of the perceiver/target, and this allows us to distinguish between the decision criterion, which is bias, and the stimulus criterion, which is not. Furthermore, the ability to determine accuracy may not be necessary to understand the factors that affect appraisals. SDT can be used as a heuristic for understanding the stimulus and person characteristics that should affect judgment strategies. Moreover, it should be possible to assess the advantages and disadvantages of different

decision-making strategies, as we discuss below, with out knowing precisely whether a specific judgment instance was accurate or not.

PRIMARY APPRAISALS OF THREAT FROM A SIGNAL DETECTION THEORY PERSPECTIVE

Feldman Barrett and Fong (1996) recently employed the logic of SDT to discuss how sensitivity, response style, and base rates are involved with primary appraisal of threat. They argue that the ambiguity typically associated with threat cues limits sensitivity (Fiske & Taylor, 1991; Paterson & Neufeld, 1987). When making judgments under uncertainty, most researchers agree that it is adaptive to use the base rates of the stimulus in question (Nisbett, Krantz, Jepson, & Fong, 1982; Tversky & Kahneman, 1982). Although psychologists have argued that individuals fail to use base rates for a number of cognitive reasons (e.g., they attend to the wrong information or they fail to apply statistical logic), Feldman Barrett and Fong (1996) argue that there is a motivation for not relying on base rates: self-protection. That is, judgment errors differ in their consequences and reinforcement power and this will affect people's judgment strategies. Failing to detect a threat (i.e., a miss) will cause an individual to experience the full force of the threat and incur psychological, structural, or physical damage. In contrast, detecting a threat when none is there (i.e., a false alarm) will cause interpersonal disruption, behavioral restriction, and needless anxiety (e.g., Mathews & MacLeod, 1994), resulting from the erroneous perception of the self as vulnerable and others as intending harm when this is not the case (Leary, 1957, Sullivan, 1953; Horney, 1950).

As illustrated below, the likelihood of obtaining misses and false alarms is a function of both the prior probability of threat and the perceiver's decision-making strategy. Let the stimulus-response matrix in Fig. 1.1a represent an environment with a high base rate for threat where the observer can accurately appraise the presence or absence of threat in every event; he or she has a hit rate of 100% with no misses or false alarms. Considering the ambiguous and inconsistent nature of most threats (Fiske & Taylor, 1991; Paterson & Neufeld, 1987), however, it is unlikely that a person would obtain this perfect hit rate because the ambiguity and unpredictability of stimuli makes accurate detection quite difficult. One decision-making strategy available to the individual would be to rely on base-rates. Consider the stimulus-response matrix of an individual who relies on the base rates to appraise threat (Fig. 1.1b): the individual experiences misses 16% of the time and false alarms 16% of the time. Thus, 16% of the time the individual would face a threat unprepared because she or he failed to detect it, and 16% of the time he or she would prepare for a threat that never materialized.

If the individual is concerned about maximizing self-protection, he or she will use a judgment strategy that minimizes the error in judgment that is perceived to

a

Appraisal	Reality		
	Threat	No Threat	
	Threat	No Threat	
Threat	80	0	80
No Threat	0	20	20
	80	20	

FIGURE 1.1A Correct judgments in a threatening environment.

b

Appraisal	Reality		
	Threat	No Threat	
	Threat	No Threat	
Threat	64	16	80
No Threat	16	4	20
	80	20	

FIGURE 1.1B Use of base-rate information in a threatening environment.

c

Appraisal	Reality		
	Threat	No Threat	
	Threat	No Threat	
Threat	80	20	100
No Threat	0	0	0
	80	20	

FIGURE 1.1C Use of zero-miss strategy in a threatening environment.

be the most costly (Feldman Barrett & Fong, 1996); the base rate for threat in the environment will contribute to the relative costs of misses and false alarms. If we assume that the magnitude of threat is associated with the frequency of threat, then a large prior probability of threat in the environment (i.e., a high base rate for threat) should be associated with a goal to reduce the number of misses more than false alarms. Although random acts of violence do occur, we have assumed for the moment that a threat in a relatively threatening environment will be more harmful than that in an environment where the base rate for threat is lower. The magnitude of the harm, along with the frequency of misses, will produce aversive learning associated with failing to detect a threat when it is present. To reduce the number of misses, the individual can substantially lower her or his decision criterion, thereby causing most cues to exceed threshold and be perceived as a threat; Feldman Barrett and Fong (1996) call this a "zero-miss" strategy. As a result, any cue, however weak, will exceed threshold and the individual will perceive the presence of a threat. By responding to every event as a potential threat, the individual maximizes his or her positive hit rate and minimizes misses (Fig. 1.1c). For some portion of the time, however, an individual will perceive threat where the probability of danger is low or nonexistent (i.e., the number of false alarms will increase from 16% to 20%). In a high-threat environment, however, the costs associated with false alarms may be preferred over the cost of misses.

a

		Reality		
		Threat	No Threat	
Appraisal	Threat	4	16	20
	No Threat	16	64	80
		20	80	

FIGURE 1.2A Use of base-rate information in a nonthreatening environment.

b

		Reality		
		Threat	No Threat	
Appraisal	Threat	0	0	0
	No Threat	20	80	100
		20	80	

FIGURE 1.2B Use of positive-illusions strategy in a nonthreatening environment.

In contrast, a small prior probability of threat will be associated with a goal to reduce the number of false alarms rather than misses. The stimulus-response matrix in Fig. 1.2a represents an environment with a low base rate for threat where the individual relies on the base rates to appraise threat. The individual experiences false alarms 16% of the time and misses 16% of the time. Although misses may still be harmful in a low-threat environment, we assume that they are less problematic because the threat itself may be less intense. Relative to the costs of a miss in a relatively benign environment, false alarms may be more costly; preparing for threats that never appear can have serious emotional, behavioral, and interpersonal consequences. To reduce the number of false alarms, the individual can adopt a more stringent decision criterion. As a result, most cues will fail to exceed threshold and will not be perceived as a threat. Feldman Barrett and Fong (1996) call this a "positive-illusion" strategy (Fig. 1.2b). By responding to the environment in this way, the individual maximizes his or her correct rejection rate and minimizes false alarms.¹ For some portion of the time, the individual will fail to perceive a threat when it is really there (i.e., the number of misses will increase from 16% to 20%). Although an increased miss rate can be associated with psychological costs, the consequences of a false alarm may outweigh those of a miss in a relatively benign environment.

Both misses and false alarms are associated with costs. As a general principle, individuals will try to avoid the error that is most costly to their psychological functioning. By using either strategy, the individual is protecting the self from the harm associated with a particular type of error. Yet each strategy has its own cost, because it is associated with an increase in the other judgment error. Although we might not describe such strategies as accuracy-seeking or rational (i.e., using statistical information and formal logic to make primary appraisals), they are

¹It should also be noted that this strategy also minimizes positive hits. There are costs associated with positive hits when appraising prejudice (discussed below). The goal of minimizing these costs could also lead to a positive illusion strategy.

optimal rules learned through interactions with the environment (Einhorn, 1980; Funder, 1987). Similarly, although misses and false alarms are considered "errors" in the strict sense of the word, they are not "mistakes" from this perspective. Thus, individuals are likely to adopt zero-miss or positive illusion strategies when making judgments about prejudice and discrimination, depending on which strategy results in the least costly of errors.

If the detection of threat is under the control of feedback and reinforcement contingencies, then the individual will develop a model of the world that is based on the judgment strategies learned in the formative environment. The result is an individual who is well adapted to the conditions of the current environment. If base rates change and people do not adjust their decision criteria, however, their error rate will change as well. For example, if an environment becomes safer, a person maintaining a zero-miss strategy will make more false alarms (e.g., from 20% to 80%; Fig. 1.3a). In contrast, if an environment becomes more threatening, a person maintaining a positive illusion strategy will experience more misses (e.g., from 20% to 80%; Fig. 1.3b). As the base rates increasingly deviate from an individual's judgment strategy, the individual's error rate will increase, the psychological consequences associated with each type of error will intensify, and a decrease in adaptation and well-being will result.

Failure to change a decision criteria in response to new base rates for threat can occur for three reasons. First, individuals using a zero-miss strategy may fail to calibrate to the base rates of the larger environmental context because of behavioral restriction. Avoiding certain situations or people is one way to avoid a miss. Such avoidance also prevents individuals from encountering disconfirming evidence, however, and that in turn contributes to maintaining the use of a zero-miss strategy.

Second, individuals using either a zero-miss or a positive illusion strategy may fail to detect changes in their environment because of cognitive biases. Previous experience will produce cognitive structures that direct attention to information that is consistent with the formative environment and filter out that which is inconsistent. An individual will develop cognitive structures that facilitate or inhibit threat detection, associated with expectancy that either most, or few, experiences have the potential to be dangerous or harmful. In either case, the individual develops well-entrenched assumptions about how to interpret ambiguous stimuli (Ittlesone & Kilpatrick, 1951) and will be chronically prepared to deal with ambiguous events (Kahneman & Tversky, 1982) in a way that matches their formative environment. Previous research suggests that implicitly held expectancies mediate the large effects of context on recognition, and exert their greatest influence on the interpretation of ambiguous stimuli (Epstein & Roupenian, 1970). Expectancies that have developed over a lifetime of previous experience not only have a profound effect on judgments, but they are usually inaccessible to conscious knowledge or intention, function automatically and effortlessly, and essentially constitute a dispositional preparedness for detecting threat (Ittlesone & Kilpatrick, 1951; Kahneman & Tversky, 1982; Posner, 1978). As a result, the

a

		Reality		
		Threat	No Threat	
Appraisal	Threat	20	80	100
	No Threat	0	0	0
		20	80	

FIGURE 1.3A Use of zero-miss strategy in a nonthreatening environment

b

		Reality		
		Threat	No Threat	
Appraisal	Threat	0	0	0
	No Threat	80	20	100
		80	20	

FIGURE 1.3B Use of positive-illusions strategy in a threatening environment.

individual may not be consciously aware that he or she has been trained to detect or avoid threat and may have limited sensitivity to the increase or decrease in threat cues in a new or changed environment. In addition, decision rules are typically learned deductively (Einhorn, 1982) and are used without intention or awareness (Lewicki, Hill, & Sasaki, 1989). These decision rules structure the encoding of ambiguous information such that it will be seen as confirming evidence and thereby strengthen the further use of the rule (Kahneman & Tversky, 1982). As a result, confirmatory biases will lead people to try to verify, rather than falsify, their working hypotheses about the world.

Third, individuals using either strategy may fail to calibrate to a change in environmental conditions for emotional reasons. Threat appraisals may constitute an aversive learning context that has intense emotional consequences for judgment errors. If individuals modify their learned judgment strategy in any way, they will encounter more errors of the type that they have learned to avoid. Not only will the individual suffer the full consequences of the current judgment error, but he or she will have to tolerate the emotional arousal associated with an error; the individual may even recall or even re-experience similar previous situations where he or she suffered in some way by making the error. Thus, the error will likely have a strong emotional currency because in the formative environment, it was psychologically, structurally, or physically costly. Because judgment errors will be emotionally disruptive to the individual, they may retain strong reinforcement power and may subsequently reinforce the readoption of the original appraisal strategy.

This theoretical framework suggests the critical role that previous experiences can play in affecting the judgment strategies that individuals use to determine whether or not they have been a target of prejudice or discrimination. As with other types of primary appraisals, previous experience with prejudice and discrimination will influence the type judgment error that a person is motivated to reduce. At this point, we should clarify that when we talk about "response bias" or

"judgment error," we are not using the term pejoratively to mean a given judgment is unjustified or not understandable. Rather, we are using the term as a description of a perceiver's judgments about the presence or absence of a stimulus relative to the actual base rates for the stimuli in the environment. In the remainder of the chapter, we explore what sensitivity and response bias can contribute to an understanding of perceptions of prejudice and discrimination. We also consider whether there is any evidence to suggest that judgments of prejudice are associated with the cost-benefit analysis that we have presented.

SIGNAL DETECTION THEORY AND PERCEPTIONS OF PREJUDICE

According to SDT, sensitivity and response bias are separable processes that together produce one judgment. Previous research on perceptions of prejudice and discrimination has examined variation in individuals' judgments of prejudice or discrimination, but most studies have not examined whether an individual *accurately* detected the presence (or absence) of prejudice or discrimination cues. To our knowledge, there is no direct research evaluating how differential sensitivity to prejudice cues and response biases combine to form the judgments that are made by research participants. Because there is no clear-cut objective stimulus value for most social behaviors, the task of separating sensitivity from response bias becomes especially difficult. Even though we use SDT for its heuristic value in examining the processes associated with appraisals of prejudice, it is fair to say that the boundary between sensitivity and bias is blurred by the lack of objective criteria to indicate when prejudice or discrimination occur.

SENSITIVITY

A target's sensitivity to prejudice would reflect her or his ability to accurately detect the presence or absence of cues indicating prejudice and discrimination. Sensitivity to prejudice and discrimination can vary because of properties of the observer or properties of the stimulus cues.

Properties of the Individual

Theoretically, one could argue that some people are more able to detect prejudice and discrimination than others and that this ability is separate from their response biases. Sensitivity might be a function of people's general knowledge about social interactions or their specific knowledge about prejudice (Essed, 1991). People's knowledge about prejudice can come from either their own personal experience with prejudice, from accounts of friends, or from other sources such as explicit training from parents (Essed, 1991). For example, people who are more socially aware might be more likely to notice when a person has been overlooked than those who are less socially aware. (These individuals might also

be more adept at delineating possible attributions for this behavior, but this is a matter of response bias, rather than sensitivity.) In addition, people who are knowledgeable about the history of prejudice might be aware of and notice a larger range of behaviors that can indicate possible prejudice. (Again, if they are also more able to determine whether there is a specific connection between an action and the larger social implications of that action, then this is a matter of response bias, rather than sensitivity.) Practically, individual differences in knowledge about prejudice are likely to be confounded with factors that influence the perceptions of base-rates, which in turn have their influence on response biases.

Properties of the Stimulus

Like the difficulty associated with identifying person-based differences in sensitivity, the stimulus characteristics that affect sensitivity blur the boundaries between sensitivity and response bias. Evidence from social psychology suggests that people tend to consider many alternative explanations for behaviors that might be motivated by prejudice (Essed, 1991; Louw-Potgieter, 1989) and this is especially so when the stimulus is attributionally ambiguous (Crocker & Major, 1989; Crocker, Major, & Steele, 1998). Research on stimulus properties indicates that the probability of occurrence, the intensity, and the imminence of a stimulus all influence the ambiguity of the information, which in turn should affect the sensitivity for when the information is or is not presented, as well as what the information actually means.

Probability of Occurrence

Cues to prejudice and discrimination are probabilistic in nature, and this enhances their ambiguity. The probability of occurrence is reflected in actual base rates. Ruggiero and colleagues (Ruggiero & Major, 1997; Ruggiero & Taylor, 1995, 1997) have conducted several studies testing the impact of base rates on attributing (or not attributing) negative evaluations to prejudice. In these studies, participants first completed a test of their abilities. They were then told that their tests would be graded by one of eight outgroup members (e.g., males for female participants). Participants were also told that of these eight people, either all (100%), 6 (75%), 4 (50%), 2 (25%), or none (0%), were known to discriminate against members of the participant's group. After a delay period, participants received a failing grade on the test, making them ineligible for a lottery. Finally, participants completed dependent measures that included a rating of the extent to which they attributed the grade they received to discrimination. Consistent with the prediction that prejudice is likely to be perceived when the probability of occurrence is high, participants were most likely to judge negative feedback as prejudicial when 100% of the evaluators discriminated against their group. Similarly, a base rate of 90% led individuals to more frequent judgments of discrimination than did lower base rates (Ruggiero & Taylor, 1995). Interestingly, the relationship between probability of occurrence and judgments of prejudice was not linear, because attributions to discrimination did not differ when the base rates

were 75%, 50%, 25%, and 0%. The one exception to this finding was for European American men, whose attributions to discrimination decreased in a stepwise fashion from the 100% to the 0% conditions (Ruggiero & Major, 1997).² Findings from all four groups suggest that probability of occurrence does affect attributions to discrimination. The absence of complete reliance on base rates, however, suggests that other factors (i.e., response biases) were also influencing attributions.

Intensity of Stimulus

Cues to prejudice and discrimination vary in intensity, and this further determines their ambiguity. Generally, the intensity of a threat cue increases as more harm is incurred (Milburn & Watman, 1981). We would predict that as the intensity of threat increases, ambiguity decreases, and greater sensitivity is possible. As a result, people will be more able to perceive when they have encountered prejudice or discrimination. Evidence for this relationship comes from the literature on perceptions of harassment of women. People are more likely to identify an event that has occurred to someone else as sexual harassment when the event had negative repercussions for the target than when the same event had no repercussions (York, 1989).³ Additionally, the presence of positive as well as negative outcomes could reduce the perceived intensity of the negative outcomes and thereby reduce the judgments of prejudice. For instance, the positive aspects of benevolent forms of discrimination such as paternalism (Glick & Fiske, 1995; VandenBerghe, 1967) may make it difficult for people to recognize this type of differential treatment as indicative of prejudice (Swim, Cohen, Hyers, Fitzgerald, & Bylsma, 1997).

Imminence of the Stimulus

Finally, the imminence of prejudice is associated with the ambiguity of threat cues. In general, the closer the individual is to danger, the more likely he or she will judge a stimulus as threatening (Milburn & Watman, 1981) and possibly prejudicial. We are unaware of any studies demonstrating that proximity to danger influences judgments of prejudice and discrimination. We would predict, however, that attributions to prejudice will become more likely as the negative consequences and the behavior in question become increasingly contiguous. For example, perhaps quid pro quo harassment ("sexual cooperation that is coerced by promises of rewards or threats of punishment," Fitzgerald & Hesson-McInnis, 1989, p. 310) is more likely to be perceived as sexual harassment than is a hostile work environment (Frazier, Cochran, & Olson, 1995) because the harm from the former is perceived to be more imminent.

²Although we have interpreted these studies as evidence that probability of occurrence influences sensitivity to prejudice cues, participants were aware of the base-rate information and therefore the observed effects might also reflect response bias as well as sensitivity differences.

³It is also possible to interpret this effect in terms of response bias. Perceived base rates for harmful events that are prejudicial may be higher than those for nonharmful events that are prejudicial and this perception may result in judgment biases.

RESPONSE BIASES

Response biases are influenced by two factors: the individual's beliefs about the base rates of the stimuli and the goals that the individual has when making a judgment about the stimulus (i.e., the perceived costs of a miss or false alarm). We review research evidence suggesting that both of these factors can influence judgments about prejudice and discrimination.

Beliefs about Base Rates

According to SDT, people will set a very low threshold for identifying the presence of a stimulus when they believe that the base rate for the stimulus is high; alternatively, people will set a high threshold when they believe the base rate for the stimulus is low. Low thresholds and high base rates will lead to a greater likelihood, whereas high thresholds and lower base rates will lead to a lower likelihood, of identifying an event as prejudicial or discriminatory. There are several types of base-rate information that might be relevant to assessments of prejudice and we address each of these below.

Base Rates about People

People have beliefs about who is prejudiced against whom. These beliefs (like stereotypes) can be defined as perceived base rates or perceptions of the probability that certain people will be prejudiced (Locksley, Borgida, Brekke, & Hepburn, 1980; McCauley & Stitt, 1978). For example, participants are more likely to label a male (versus a female) instigator as sexist, even when instigators engaged in identical behavior (Baron, Burgess, & Kao, 1991, Inman & Baron, 1996). Similarly, European American instigators are labeled as racist more often than are African American instigators, even when they engaged in identical behavior (Inman & Baron, 1996).

Base Rates about Behaviors

Behaviors are likely to vary in the extent to which they are perceived to represent prejudice against one's group (Swim, Cohen, & Hyers, this volume). Differences in judgments of what constitutes a prototypic prejudicial behavior could explain why Blacks (primarily of West Indian heritage) were more likely than East Asians to indicate that a low grade was a result of discrimination (Ruggiero and Taylor, 1997). Even though both the East Asian and Black participants underutilized base-rate information, the Black participants were more likely to do this than the East Asian participants. Ruggiero and Taylor (1997) suggest that this group difference might be the result of differences in the tendency to make internal attributions for the low grade. An alternative explanation, however, is that negative evaluations in academic contexts are less prototypic for Asian students than for Black students. Hence, the Black participants may have believed that low academic scores are a prototypical cue of prejudicial treatment more so than did the Asian participants.

Base Rates about Encounters with Prejudice

People have beliefs about the extent to which they or members of their social group have experienced prejudice and discrimination. The available evidence suggests that some of these beliefs influence attributions to prejudice. In the previously described study by Ruggiero and Taylor (1996), women were asked to indicate the extent to which they themselves, and women in North America, had experienced discrimination from men. The first question represents participants' perceived base rates for their own personal experiences with discrimination, and the latter represents their perceived base rates for women in general. Ruggiero & Taylor (1996) found that perceptions of personal experience with discrimination were associated with attributing a failing grade to discrimination. Similarly, African American teenagers who believed that they were more likely to be personally discriminated against were also more likely to indicate that scenarios describing prototypical incidents of discrimination were indicative of discrimination (Taylor, Ruggiero, & Louis, 1996). Unlike beliefs about personal encounters with prejudice, however, beliefs about the tendency for one's group to experience discrimination were not predictive of women's or African Americans' judgments (see Taylor *et al.*, 1996, for a possible explanation for the difference in predictive power for the two types of base rates).

A daily diary study of perceived prejudice indicated that perceptions of both personal and group discrimination affected the number of prejudicial events that women reported experiencing during a 2-week period (Swim *et al.*, 1997). Prior to completing the daily diaries, women estimated the number of the prejudicial events that they typically experienced in a week (personal base-rate information) and the number of events they thought a typical woman experienced in a week (group base-rate information). During the diary portion of the study, participants recorded the number of gender-related events that they experienced and they judged the extent to which each event was prejudicial. Both personal and group base rates were positively associated with the number of events judged as prejudicial.⁴

Goals

The social psychological literature is replete with references to the ways that goals can influence judgments about other people (Fiske & Taylor, 1991). Judgments of prejudice and discrimination are no different. When we judge a person to be prejudicial, we are using stereotype information about who is likely to be prejudiced against whom. Therefore, past research on cognitive and motivational factors influencing the use of stereotypes (e.g., Brewer, 1996; Neuberg & Fiske, 1987) is likely to inform us about how goals of accuracy and self-protection influence the types of judgment strategies that people use when making appraisals of prejudice and discrimination.

⁴In contrast to these findings for women and Ruggiero and colleagues findings, Swim *et al.* (1997) found no support for the relationship between African American participants' personal base-rate estimates and the number of events they recorded in their diaries as being prejudicial. African American participants were not asked about their perceived group base rates in this study.

Costs

We have argued above that the major goal associated with strategies for appraising the presence or absence of prejudice is self-protection: individuals try to maximize correct judgments while minimizing the judgment errors that are most costly. The costs associated with errors in judgment (misses and false alarms) will influence an individual's decision criteria and, therefore, his or her response tendencies. We address each of these costs in turn.

Costs of Misses

Evidence suggests that missing a prejudice cue can endanger an individual's self-esteem. For example, early research on reactions to discrimination indicated that after receiving negative feedback from a male evaluator, women who did not identify the evaluators as prejudiced had lower global self-esteem than women who did make this attribution (Dion, 1975, 1986). Results consistent with these conclusions have been found for the impact of negative evaluations on African, Jewish, and Asian Americans (Dion, 1986; Dion, Earn, & Yee, 1978; Miller, Boye, & Gerard, 1968 as cited in Dion *et al.*, 1978). Recent research indicates that state rather than stable or trait self-esteem may be most vulnerable to misses. In addition, performance self-esteem (e.g., "I feel as smart as others," Heatherton & Polivy, 1991, p. 58) is hurt by failing to appraise prejudice, whereas social self-esteem (e.g., "I feel concerned about the impression I am making," Heatherton & Polivy, 1991, p. 58) increases with misses (Ruggiero & Taylor, 1997). Furthermore, a miss can be costly because the individual will incur the negative consequences of encountering prejudice, such as internalization of unfavorable or restrictive stereotypic beliefs about one's group (e.g., Quinn & Crocker, this volume). Misses can also be costly at a societal level as well. If prejudice and discrimination are not identified as a source of political and economic disadvantage, then targets of prejudice bear the burden of responsibility for improving their status. (Taylor, Ruggiero, & Louis, 1996).

Costs of False Alarms

Incorrectly judging the presence of prejudice is associated with several different types of psychological disruption. First, false alarms can be associated with interpersonal disruption. Openly labeling events as prejudiced or discriminatory can cause an individual to be identified as overly sensitive (Crosby, 1984; Feagin & Sikes, 1994; Swim, Cohen, & Hyers, this volume). Furthermore, interpersonal disruption can result from the distrust of outgroup members. In the late 1960s, Grier and Cobbs (1968) proposed that African Americans have a "healthy cultural paranoia." Following this characterization, researchers have examined the tendency for African Americans to distrust and be suspicious of European Americans (Terrell & Terrell, 1981; Thompson, Neville, Weathers, Poston, & Atkinson, 1990). This distrust (or "racism reaction") is thought to stem from feelings of threat from European Americans (Thompson *et al.*, 1990). While the distrust may

be justifiable, the disruption that results from mistrust can hinder the formation of specific relationships, even when there is primary importance placed on the relationship between two individuals. For example, African American individuals who have high mistrust levels are more likely to expect their European American counselors to be less accepting, trustworthy, credible, satisfactory, and more likely to expect less help with general anxiety, shyness, inferiority feelings, and dating difficulties (Nickerson, Helms, & Terrell, 1994; Watkins & Terrell, 1988; Watkins, Terrell, Miller, & Terrell, 1989). Cultural mistrust can also affect the counseling process by affecting the amount of disclosure during a counseling session (Thompson, Worthington, & Atkinson, 1994), possibly leading to self-fulfilling prophecy combined with a confirmatory bias. These findings from the counseling literature may also apply to other forms of interactions (e.g., Kleck & Strenta, 1980). For example, research indicates that stigmatized individuals' expectations about how others will treat them can lead them to perceive unfavorable treatment even when none is given (Kleck & Strenta, 1980).

Second, false alarms can be associated with behavioral restriction. One way to manage the perceived presence of prejudice is to structure one's life to decrease the likelihood of encountering it (Swim *et al.*, this volume). While complete avoidance is unattainable for the most part (Simpson & Yinger, 1985), targets can make choices about when (or when not) to enter particular situations or interactions. For instance, women (and not men) are likely to prefer to change groups and gender composition of groups when they anticipate being the solo member of their gender in the group and this preference is related to women's perception that they will be treated stereotypically (Cohen and Swim, 1995). Similarly, distrust of European Americans may lead African Americans to terminate employment (Terrell & Terrell, 1981) and prematurely terminate counseling with European American counselors (Terrell & Terrell, 1984). Also, reduced numbers of African American applicants to jobs has been attributed to a desire to avoid the rejection and interpersonal stress that results from prejudice from European American employers (Pettigrew & Martin, 1987).

The behavioral restriction that results from such avoidance has costs (Stangor & Sechrist, this volume). Descriptive research from counseling psychology illustrates that avoidance has potential costs for African Americans (Pinderhughes, 1982). Past experience with misdiagnoses by clinicians and intrusiveness of social service workers has lead many African American families to avoid seeking mental health services. As Biafora, Warheit, Zimmerman, Apospori, and Taylor (1993) note, "While racial mistrust may provide an adaptive coping mechanism for some individuals, it could also be hypothesized that mistrust may be maladaptive for others in that it may motivate them to withdraw from activities that are essential if they are to access the opportunity and reward structures of the dominant society—for example, school completion and/or seeking employment" (p. 894).

Third, false alarms are associated with anxiety (Mathews & MacLeod, 1994). If targets of prejudice believe that they are going to be evaluated in terms of their social group rather than on their own merits, anxiety may result and interfere with

their performance (see Steele & Aronson, 1995; Aronson, Quinn, & Spencer, this volume). For example, women can be distracted when they are solo members of their gender in a group, and this interferes with their work even when they are not treated differently from other group members (Lord & Saenz, 1985; Saenz, 1984); this occurs particularly when women are socially worried and believe they are being scrutinized (Lord, Saenz, & Godfrey, 1987). Thus, the anxiety associated with anticipating a threat can interfere with task performance.

SUMMARY

We have tried to demonstrate that SDT provides a useful framework for understanding how sensitivity and response biases can affect people's appraisals of prejudice. In particular, we discussed how response biases (either under- or overestimating prejudice) are associated with minimizing the costs of one judgment outcome at the expense of the other. Next, we elaborate on the use of zero-miss and positive-illusion judgment strategies when perceiving prejudice and discrimination.

APPRAISALS OF PREJUDICE: A COST-BENEFIT ANALYSIS OF JUDGMENTS UNDER UNCERTAINTY

MINIMIZING FALSE ALARMS: A POSITIVE-ILLUSION STRATEGY

There have been two primary lines of research that have addressed how and why individuals minimize perceptions of prejudice and discrimination. First, the act of denying or minimizing prejudice has been used to explain the robust finding that people report lower frequency and severity of discrimination directed at themselves than directed at members of their group (Crosby, 1984; Ruggiero & Taylor, 1994; Taylor *et al.*, 1996; Taylor *et al.*, 1994). It is difficult to rule out alternative explanations for this finding, however (e.g., the overestimation of group-based experiences).

Second, the previously mentioned laboratory studies by Ruggiero and colleagues (Ruggiero & Taylor, 1995, 1997; Ruggiero & Major, 1997) have nicely demonstrated women's, Blacks' (of West Indian heritage), and East Asians' tendency to underutilize base-rate information about the presence of prejudice. These researchers note that minimizing appraisals of prejudice may reflect a general tendency for people to hold "positive illusions" or "illusions of unique invulnerability." Because other groups (e.g., European American men) are willing to make attributions to prejudice, however, it is unlikely that the minimization of prejudice is a result of simply a general tendency for people to hold positive illusions (Ruggiero & Major, 1997). Instead, as Ruggiero and colleagues note, the positive

illusions in this context are likely a function of the relatively greater psychological benefits of attributing negative feedback to something about oneself rather than to discrimination. These benefits include higher social self-esteem and greater perceptions of control at the cost of performance self-esteem (Ruggiero & Taylor, 1997).

MINIMIZING MISSES: A ZERO-MISS STRATEGY

Some individuals might engage in judgment strategies that allow them to minimize the number of times that they fail to correctly identify prejudicial situations. Before we begin this section, we would like to offer a clarification: we are by no means "blaming the victim" by suggesting that people who perceive themselves to be the target of prejudice are "oversensitive." Rather, we are suggesting that anyone who has previous, pervasive experiences with threat will be preattentively prepared to see threat in a current situation because they have learned a decision rule through interactions with the environment. If individuals learn decision rules (i.e., response biases) that are adaptive to their life circumstances, then people who have previous experience with prejudice will be more likely to perceive it in the present, all other things being equal. If the current environmental context has a high probability of prejudice, then a zero-miss strategy will be adaptive for that individual. In such an environment, the individual using a zero-miss strategy will not only have a high positive hit rate, but may also have a slightly higher false alarm rate (i.e., perceive more prejudice than is actually there). Despite this small increase in false alarms, however, the zero-miss strategy is likely adaptive when living in conditions where prejudice and discrimination thrive. We do argue, however, that a zero-miss strategy may be less adaptive when the base rate of prejudice in the current environment is reduced. We are not denying that prejudice exists, nor that it is prevalent in many environments or contexts. Rather, we are suggesting that overestimations of prejudice may be more prevalent in some contexts than in others. Thus, the zero-miss strategy may be less adaptive in circumstances where there is a lower base rate for prejudice and discrimination, and may make it more difficult for a person to learn that the danger of being a target of prejudice is not lurking in a new environment.

Grier and Cobbs' (1968) essentially described a zero-miss strategy (i.e., cultural mistrust) as healthy because it can be an optimal coping strategy for those living in a highly prejudicial environment (see also Vorauer & Ross, 1993). Judgment strategies designed to minimize misses may be a result of living in a threatening environment where European Americans have demonstrated prejudice against African Americans in educational, political and legal, work and business, and interpersonal and social contexts (Terrell & Terrell, 1981). Furthermore, preparedness to detect and deal with prejudice can be taught at home (Biafora *et al.*, 1993; Essed, 1991). Hines and Boyd-Frankline (1982) note that "This suspiciousness is frequently a direct, learned, survival response that black children are socialized at an early age to adopt" (p.101). Thus, cultural mistrust can be explained in terms of miss-reducing strategy such that personal or collective past experi-

ences with prejudice and discrimination increase the likelihood that African Americans will be distrustful of European Americans.

Some of the findings from Ruggiero and colleagues suggest that a tendency to use a zero-miss strategy can be heightened when threat is made salient and when the costs of false alarms and positive hits are lessened. In one condition of the previously described studies (Ruggiero & Major, 1997; Ruggiero & Taylor, 1995, 1997), participants were led to believe that the base rate for discrimination was zero (i.e., participants were told that none of the eight people who evaluated participant's work had discriminated against members of the participant's group). In these conditions, any attribution to discrimination could arguably be an overestimation of prejudice. While participants in this condition were more likely to attribute negative evaluations to their own ability or effort than to discrimination, the mean attribution to discrimination was significantly greater than zero (K. M. Ruggiero, personal communication, February 14, 1997).

An additional study suggests that attributions to discrimination in the zero percent base rate condition is a function of heightened threat. Participants were not told any information about the probability that their evaluators discriminated against women (Ruggiero & Major, 1997). Women's attributions to discrimination in this condition were significantly lower than when they were told that none of their evaluators discriminated against women. In fact, the attributions to discrimination in the no-information condition were not significantly different from zero. An interpretation of the zero percent base rate-no-information contrast is that being reminded of the possibility of discrimination increased participants' perceived threat, thereby increasing their motivation to avoid a miss, which in turn caused them to be more likely to attribute the negative feedback to discrimination.

A second study by Ruggiero suggests that decreasing the cost of labeling an event as discriminatory (i.e., the cost of a positive hit or a false alarm) serves to increase the likelihood that events will be labeled as discriminatory (Ruggiero, Taylor, & Lydon, 1997). In this study, women were told that their test responses would be evaluated by one of eight men and that half of the men discriminated against women. After receiving a failing grade for their test, participants were told that they would be given either one type of social support, two types of social support, or they were not told anything. Women anticipating two types of support were more likely to attribute the negative feedback to discrimination than to their own ability. Women receiving only one type of support were equally likely to attribute the negative evaluation to their ability and discrimination. Women receiving no support were more likely to attribute the negative evaluation to their ability than to discrimination. Armed with the knowledge that they would receive some form of social support, women may have felt that they would not incur the costs of a positive hit or false alarm (e.g., decreased social self-esteem or being told that they were overly sensitive). Thus, the relative costs of saying "yes" versus "no" was altered by providing social support, such that a miss may have been seen as more costly.

FAILURE TO CALIBRATE TO NEW CONDITIONS

The costs associated with engaging in zero-miss strategies are greatest in situations where threat is minimal or nonexistent; in contrast, the costs associated with engaging in a positive illusion strategy are greatest in high threat situations. As noted previously, people may have difficulty shifting their decision criteria when the base rates for threat change. First, for those using a zero-miss strategy, the behaviors people have employed to protect themselves from prejudice may prevent them from detecting when threat is reduced. For instance, behavioral restriction means that people are less likely to enter situations where their beliefs will be disconfirmed. As Pettigrew and Martin (1987) note with regard to avoiding prejudice, "Avoidance learning reduces the possibility of experiencing corrective situations, such as acceptance and positive interaction" (p. 54).

Second, schematic processing, such as interpreting ambiguous information in line with one's beliefs or focusing on confirming rather than disconfirming evidence, may make it difficult to change decision criteria. Confirmatory biases can decrease the likelihood that people will notice changes in the occurrence of prejudice and discrimination. For instance, stigmatized individuals believe that people will treat them unfavorably even when there is no evidence of negative behavior (Kleck & Strenta, 1980). In general, the research indicating that people tend to maintain their stereotypes, despite disconfirming evidence, suggests that people who hold stereotypes about perpetrators of prejudice will do the same (Baron *et al.*, 1991; Inman & Baron, 1996; Rettew, Billman, & Davis, 1993).

Third, the emotional currency of encountering a miss or false alarm can make it difficult for people to stop using a positive illusion or zero-miss strategy, respectively. No research evidence is available to test whether this hypothesis holds for appraisals of prejudice, but previous authors have suggested the possibility that, in particular, misses may be so aversive as to make it very difficult to change judgment strategies. As Pettigrew and Martin (1987) note, "... because personal and vicarious experiences as a victim of prejudice and discrimination are highly emotional, this avoidance learning is deeply emotional—and emotional condition has an extremely slow extinction curve (Solomon, 1964). For these reasons, negative black responses to recruitment efforts are often especially resistant to change" (p. 54).

SUMMARY

Applying a cost-benefit analyses provides a motivational explanation for people's perceptions of prejudice and discrimination. This analysis can be used to explain both a tendency to overestimate (i.e., use a zero-miss strategy) or to minimize (i.e., use a positive illusion strategy) one's encounters with prejudice. Situational factors that affect perceptions of costs are likely to influence the strategies that people use. The behavioral restriction, schematic processing, and emotional learning associated with misses may make it difficult for people to avoid

using a zero-miss strategy, even though such a strategy is particularly costly. Similarly, the schematic processing and emotional learning associated with false alarms (and positive hits) may make it difficult to avoid using a positive illusion strategy, even though such a strategy would be particularly costly.

DISCUSSION AND FUTURE RESEARCH

A goal of the present chapter is to illustrate how SDT can provide a useful framework for understanding perceptions of prejudice and discrimination. The distinction between sensitivity and response biases helps organize, clarify, and differentiate the psychological processes and stimulus characteristics that might influence judgments of prejudice. SDT suggests specific characteristics, (probability of occurrence, intensity, and imminence) that might affect a target's ability to detect prejudice and also highlights person factors (perceived base rates and goals) that are likely to influence response styles to label (or not label) events as prejudicial or discriminatory. The differentiation between types of costs resulting from misses and false alarms provides clarity as to why people may under- or overestimate prejudice.

A consideration of two response biases, the positive illusion and the zero-miss strategies, highlights the need to expand the understanding of perceptions of prejudice as judgments that are made under uncertainty. Judgments of prejudice, like all human judgments, are subject to error. These errors are best seen as the result of adaptation attempts, rather than as "faults" associated with deficits in the perceiver (Funder, 1987). For example, a zero-miss strategy, although it might produce an overperception of prejudice in certain conditions, should be considered a reasonable response to situations with high base rates for prejudice and discrimination; in such situations, even a single encounter with prejudice may be so harmful that one reverts to this self-protective strategy. Furthermore, applying this framework to perceptions of prejudice suggests that it would be fruitful to examine the role of past experiences with prejudice on perceptions of current experiences particularly in situations where actual base rates have changed. It would also be fruitful to examine situational characteristics that are likely to heighten or reduce perceived threat and alter the relative costs of misses, false alarms, and positive hits. For example, goal orientation (accuracy versus self-protection) may be the result of differences in power between groups (Vorauer & Ross, 1993). It may be the case people are likely to adopt a zero-miss strategy when they are in a situation that highlights their membership in a group that is lower in power than some outgroup. Similarly, it might be beneficial to examine individual differences in perception of threat and relative costs of errors, perhaps related to differences in past experiences or extent to which people are group-identified (Branscombe & Ellemers, this volume; Deaux & Ethier, this volume).

While our analysis emphasized the target's perspective on prejudice, the SDT framework could also be applied to third-party observers' perceptions or to

perpetrators' perceptions of their own attitudes and behaviors. Like targets of prejudice, third-party observers and perpetrators will likely vary in sensitivity and response biases. Perpetrators may prefer a positive-illusion strategy over a zero-miss strategy because this would yield a more favorable self-image. The extent to which third-party observers, as well as targets of prejudice, sympathize or identify with perpetrators of prejudice could increase their likelihood of sharing a perpetrators' preference for positive illusions.

While we emphasize the role of sensitivity and response biases in perceptions of prejudice, researchers might also consider how to determine the stimulus criterion. One strategy might be to take a conservative approach of only defining an event as prejudiced when there is "clear and convincing evidence." Alternatively, one can consider taking a more liberal approach of "preponderance of evidence." Another possibility is to use criteria that have been used to define when a threat is present: the extent of harm, social norms, and intent of the perpetrator (Milburn & Watman, 1981). There are issues that should be kept in mind if these criteria are used. For instance, if one is able to protect oneself from the harmful consequences of an event, would it not be considered prejudice? If social norms are different for targets and perpetrators, whose social norms should apply? If prejudice occurs from automatic processes or ignorance, does the lack of intent justify not labeling the behavior as discriminatory? The selection of the stimulus criterion will affect accuracy rates with some criteria being more stringent than others. Thus, discrepancies in stimulus criteria, as well as sensitivity and response biases, are likely an additional source of differences in perceptions of prejudice.

In general, research on perceptions of prejudice can benefit from insights gained through a more general theory of judgmental processes such as signal detection theory. SDT provides a framework for understanding stimulus characteristics and psychological processes that likely influence perceptions of prejudice. It helps differentiate psychological factors (e.g., sensitivity and response bias; costs of positive hits, misses, and false alarms) that likely impact perceptions of prejudice. Finally, it helps us understand the cognitive and motivational reasons why errors or biases in judgments come about.

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