Coping with Minority Status

RESPONSES TO EXCLUSION AND INCLUSION

Edited by

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2009

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On Being the Target of Prejudice:
Educational Implications

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Jews rule the world by proxy. Or so says the former prime minister of Malaysia, Dr. Mahathir Mohamad. In October 2003, in a speech to the 57-nation Islamic Summit in Malaysia, the then-prime minister lashed out at world Jewry. "The Europeans killed 6 million Jews out of 12 million," stated Mohamad, "but today the Jews rule this world by proxy and get others to fight and die for them." However disturbing and offensive Dr. Mohamad's words, they were not surprising to at least one of us who had spent a summer vacationing in Malaysia. Upon his arrival into Kuala Lumpur International Airport, Inzlicht noticed thousands of copies of *The protocols of the learned elders of Zion* on prominent display. Seeing this "classic" book – which is a fraudulent document purporting to describe a plan to achieve Jewish global domination – shocked and affronted Inzlicht, who happens to be Jewish. When he later entered the country, Inzlicht could not help but ask how his social identity was impacting the way others saw and interacted with him: He was mistrustful of others, watchful of what he said and did, and vigilant for the way others interacted with him. Having to enter a land that so vilifies and demonizes his Jewish identity was, in short, threatening.

This chapter is concerned with the psychological effects of entering threatening environments, focusing not on the relatively clear case above, but on the more subtle and commonplace phenomenon of individuals entering environments where their cultural identity is devalued and stigmatized. How do academic performance, motivation, and self-concept suffer when people feel excluded, discriminated against, or exposed to negative

stereotypes? For example, how would a Jewish student perform and feel in a Malaysian classroom knowing what the former prime minister believes? And what can educators and policy makers do to help people overcome the obstacles posed by discrimination? These questions are important because our world is increasingly becoming a tapestry of different cultures, races, and religions, and with these changes the importance of harmonious intergroup relations is increased.

For the past few years we have been trying to find answers to these questions and in so doing understand what it means to belong to a group with a stigmatized social identity (Goffman, 1963). Although social psychologists have long been interested in the roots of stereotyping, prejudice, and discrimination among those who hold prejudiced beliefs, only recently have they focused significant attention on the psychological effects of these processes among the targets of prejudice (Major & O'Brien, 2005; Swim & Stangor, 1998). This emerging research has demonstrated that stigma – an attribute that, in a particular context, marks individuals as different and leads them to be devalued and marginalized in the eyes of others – has far-ranging effects on its targets (Crocker, Major, & Steele 1998). Stigmatized individuals are judged not on the content of their character but on the basis of their group membership. As a result, these individuals experience more negative outcomes than their nonstigmatized counterparts. African-Americans, for example, suffer from academic underachievement, have more stress-related illnesses, face higher risks of physical attack, and have reduced access to housing, employment, and education (see Allison, 1998, for a review). The possibility that one can be the target of prejudice and discrimination is therefore the defining feature of stigmatization (Crocker et al., 1998).

We focus here on a model that draws on research from social psychology to help us understand how being the target of prejudice affects people. Although prejudice can affect many different aspects of people's lives, we concentrate on how it undermines such outcomes as standardized test performance, academic engagement, academic self-concept, and institutional trust. We begin by reviewing research showing how environmental cues that on the surface appear benign and innocuous can communicate to people that they could be devalued, stigmatized, or discriminated against because of their particular social identity. We describe, for example, how being in the minority can activate negative race stereotypes and undermine African-Americans' standardized test performance through a phenomenon known as *stereotype threat* (Steele & Aronson, 1995). We next explore the specific processes through which stereotypes can influence the targets of

prejudice. We focus specifically on the affective, cognitive, and motivational consequences of negative stereotypes. We also consider individual risk factors for prejudice effects and discuss a particular vulnerability – *race-based rejection sensitivity* (RS-race) (Mendoza-Denton, Downey, Purdie, Davis, & Pietrzak, 2002). Third, we examine how coping with prejudice can shape a person's identity and self-concept. By drawing on the concept of *attributional ambiguity* (Crocker & Major, 1989), we illustrate how negative stereotypes can lead people to devalue and disidentify from important domains in their lives and foster unclear and inaccurate self-concepts. We end with a hopeful note, showing that the consequences of stigma are not inevitable, but rather situationally determined and open to remediation. Rather than offering a comprehensive analysis of stigma research (see Major, Quinton, & McCoy, 2002; Steele, Spencer, & Aronson, 2002), this chapter presents a working model of prejudice effects and provides a selective review of key components of this model. We begin by describing our working model.

HOW PREJUDICE AFFECTS TARGETS: A MODEL

Figure 1.1 presents a model we've adapted from Cohen, Garcia, Masters, and Apfel (2005), describing how prejudice can hurt the targets of stigma. While Cohen et al.'s (2005) framework focuses on social-identity threat more generally, our model focuses specifically on academic outcomes. This model begins with the targets of prejudice being aware of their group's stigmatized social identity, including the awareness that their group has lower status, compares unfavorably to other groups, and is negatively stereotyped (Steele et al., 2002). Negative stereotypes about members of chronically stigmatized groups, for instance, are well known and widespread in our society, even among individuals who do not personally believe or endorse those stereotypes and among members of stigmatized groups themselves (Devine, 1989; Vorauer, Main, O'Connell, 1998). Awareness of their stigmatized status then leads people to become vigilant and to question whether negative stereotypes will be used as a lens through which their actions and behaviors will be judged. The awareness of stigma, in other words, creates suspicions of bias and discrimination, and causes people to be cautious and uncertain about whether they are being treated unfairly because of their social identity.

In their landmark paper on stigma, Crocker and Major (1989) called this state of uncertainty *attributional ambiguity* and defined it as the doubt that people have about whether they are being judged because of personal deservingness or because of the prejudices held against their group. For
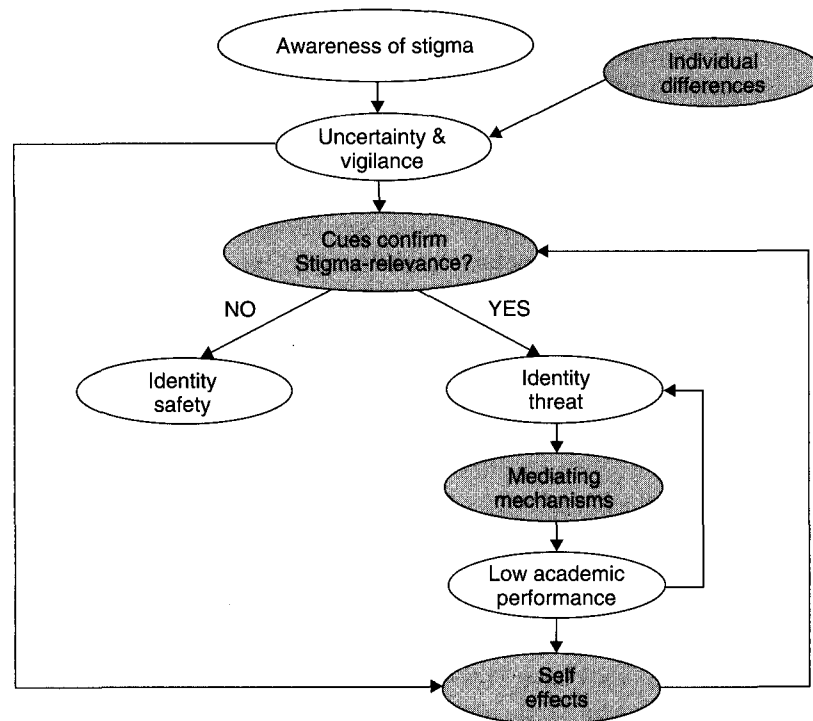
FIGURE 1.1. A model of threatening academic environments.

example, after receiving a failing grade, an African-American student may question whether her poor grade reflects her own performance or her professor's racism. By blaming discrimination rather than the quality of her work, this uncertainty allows her to maintain positive self-regard (Crocker, Voelkl, Testa, & Major, 1991). When she discounts the instructor's feedback, however, she also rob herself of opportunities to gain self-knowledge and to develop a stable self-concept (Aronson & Inzlicht, 2004). Attributions unrelated to one's efforts (i.e., to discrimination) can also lead people to feel that they have little control over their outcomes and destinies. We will return to these self-relevant effects later. For now, let's focus on people's vigilance.

Vigilance means that people survey their surroundings to determine whether they are in a potentially threatening environment. People become vigilant for, and sensitive to, the cues communicating that their group's stigmatized social status may be relevant in the immediate situation (Kaiser, Vick, & Major, 2006). Some settings provide few cues that stereotypes and

prejudice are relevant, and thus result in individuals experiencing little or no threat to their social identities. These "identity-safe" environments assure individuals that their stigmatized social identities pose no barrier (Davies, Spencer, & Steele, 2005). Other situations, however, are less hospitable and can become identity threatening by dint of cues within them. Scanning the titles in a bookstore and noticing that one of the bestsellers is, say, an anti-Semitic tract, sends a not-so-subtle message that Jews are devalued in that environment and perhaps not welcome (see Inzlicht & Good, 2006, for a review). When people are uncertain of their standing, are watchful for stigma-relevant cues, and find themselves in just such an inhospitable environment, a process is set off that can hurt environmental trust, self-concept, and intellectual performance. Steele and colleagues (2002) have called this phenomenon *social identity threat*.

Social-identity threat is the discomfort individuals feel when they suspect that their social identity can put them at risk for social devaluation, exclusion, and biased treatment. It is a situational predicament that occurs when individuals become fearful of being treated not as an individual, but as a member of their devalued social category. One of the more pervasive forms of social-identity threat, and the one we focus on here, is stereotype threat – being at risk of confirming a negative stereotype about one's group (Steele & Aronson, 1995). Consider the example of an African-American or Latino student trying to solve a difficult question written on the blackboard. As with his White classmates, this student faces performance pressures – he wants to look smart, wants to get the correct answer, and wants to avoid looking dumb. He also, however, faces an additional pressure not faced by his White classmates, the pressure stemming from the desire to disconfirm stereotypes alleging African-American or Latino intellectual inferiority (see Aronson, 2002).

This second pressure, arising from a devalued social identity, can increase anxiety and arousal (Ben-Zeev, Fein, & Inzlicht, 2005; Blascovich, Spencer, Quinn, & Steele, 2001; Mendoza-Denton et al., 2002; O'Brien & Crandall, 2003), tax the cognitive resources of self-regulation and working memory (Inzlicht, McKay, & Aronson, 2006; Schmader & Johns, 2003), and negatively tilt the motivational frame with which people view situations (Seibt & Förster, 2004). Returning to our aforementioned example, anything our African-American or Latino student does or says can be interpreted along stereotypical lines, and this possibility is stressful; it diverts his cognitive resources away from the task at hand, and changes the way he approaches and views the problem. Instead of thinking about the question posed to him, he may become concerned with his group's and his own

reputation; and to the extent that he values his social standing, this can be unnerving. The likely result, as numerous studies have now shown, is that he underperforms. And to the extent that he repeatedly finds himself immersed in such threatening environments, he may even change the way he views himself and the way he values academics. In other words, not only does prejudice affect the way the stigmatized perform in threatening environments, it can affect the way they perceive and relate to the environment in the future and the way they conceive of themselves and their prospects in that environment.

But who is most likely to be affected by negative stereotypes? The series of steps outlined in Figure 1.1 delineating the psychological course targets take when confronted with prejudice and stigma is not uniform. Important individual differences make some people more susceptible and others more resilient to the kinds of effects we have outlined so far. Our model illustrates two junctions that can lead to either identity safety or identity threat. One type of risk factor influences whether people expect and readily perceive cues confirming stigma relevance. Some individuals, for example, have a long history of experiencing discrimination and therefore come to anxiously expect and readily perceive it in the future (Kaiser et al., 2006; Mendoza-Denton et al., 2002; Pinel, 1999). These individuals feel chronic uncertainty about whether they are being viewed equitably or stereotypically and are therefore chronically vigilant and reactive toward cues confirming this latter possibility. The other type of risk factor affects how people respond to stereotypes once they're "in the air" (Steele, 1997). Some people, for example, may assess themselves as capable of disproving the stereotype and feel able to handle the pressure (Lazarus & Folkman, 1984), as is the case, say, when someone feels challenged and not threatened by negative stereotypes (Inzlicht, Aronson, Good, & McKay, 2006). Thus, individual differences may exist not only in whether a threat is activated in the first place, but also in how well people can regulate an activated threat.

This model has recursive elements. Initial low performance on a test, for example, can feed into threat perception and further lower performance, thereby creating a positive feedback loop. Similarly, self-effects, such as an unclear self-concept, can render people less certain about themselves and the outcomes they receive, thereby exacerbating the effects of stigma. In the remainder of the chapter, we use this framework to discuss key elements (shaded areas in Figure 1.1) of our model. We start by exploring those situations that communicate stigma relevance.

THREATENING ENVIRONMENTS

Threatening environments can be thought of as settings where people come to suspect that they could be devalued, stigmatized, or discriminated against because of a particular social identity. When they find themselves in a new setting, targets of stereotypes form a hypothesis about the setting and evaluate a broad set of cues to determine whether discrimination is in fact occurring. Any cues that signal that one's group is excluded from certain functions, is not valued socially, or is marginalized in any way, should foster mistrust and create a threatening environment (Steele et al., 2002). These environments need not directly arouse stigma relevance, but may do so indirectly through more subtle, seemingly innocuous cues. A casual chat in one's dorm room may become threatening when a student, who was once proud to say that he is the first in his family to complete high school and attend college, realizes that all his roommates' parents are college graduates and highly paid professionals (e.g., Croizet & Claire, 1998).

Settings where people find that their social group is in the numerical minority – literally outnumbered – may be particularly threatening. According to distinctiveness theory (McGuire, McGuire, Child, & Fujioka, 1978), we are selective self-perceivers and attend to those aspects of ourselves that are distinct and peculiar in our immediate social context. Thus, an African-American medical student who finds herself outnumbered by her White classmates will tend to notice and think about her "Blackness" in her White classroom, but in a different setting, say a class full of men, her race loses salience and she will become more conscious of being a woman. When people ruminate about their distinct social identity, they may also think about the stereotypes associated with and prejudices held against that identity.

Inzlicht et al. (2006), for example, found that Black participants were more likely to think about stereotypes about their race when Whites outnumbered them. In their study, Black participants took a test with two other people – two other Blacks, two Whites, or one Black and one White. Before taking the test, participants completed an implicit measure of stereotype activation. In accordance with the distinctiveness theory (McGuire et al., 1978), stereotypes should be more active for the Black participants the less their race was represented in the group (i.e., the more distinct they were). Results confirmed predictions. The more participants were racially outnumbered, the more often they ruminated on the stereotypes about their group. Our point here is that being outnumbered can increase awareness of one's distinct social identity and of the stereotypes associated with that

identity, and, ultimately, create a threatening environment where people expect stereotypes to be used in evaluating them.

And as outlined in our model mentioned earlier, this can trigger a chain of psychological events leading to underperformance. For some of the Black participants, being outnumbered by Whites and thinking about the stereotypes about their group led to lower standardized verbal test performance, presumably as an outgrowth of stereotype threat (Inzlicht et al., 2006). In another study, this time manipulating the sex composition of three-person groups, women who were outnumbered by men did worse on a math test – a domain for which women are stereotyped as inferior (Spencer, Steele, & Quinn, 1999) – than women in a same-sex group (Inzlicht & Ben-Zeev, 2000). Thus, a seemingly innocuous contextual cue – the number of Whites or men in a room – can create a threatening intellectual environment and undermine performance (see also Sekaquaptewa & Thompson, 2002).

Organizational philosophies – statements about social-identity ideology – can also increase the relevance of stereotypes in a setting. Working for a business that, say, has a strict colorblind policy can be reassuring to a new Latina employee who is welcomed by a rainbow coalition of diverse employees on her first day on the job. However, the message sent by this policy is quite different if she is greeted by a phalanx of White males. Purdie-Vaughns and colleagues (2008) examined this exact scenario when she handed African-American business people a brochure of a Silicon Valley company that claimed either a multicultural or a colorblind philosophy of fairness and then portrayed either a diverse or a homogeneous White workforce. As expected, contextual cues communicating social-identity ideology went beyond simple minority effects: Although everyone felt they would be less comfortable working for a predominantly White company, this was particularly true when the context failed to convey a commitment to diversity. Environments sending cues indicating that one's social identity is not of value can therefore be threatening.

Far from being an exhaustive list, our point here is to highlight how indirect, seemingly innocuous cues can send powerful messages about who does and does not belong in a situation. These situations can foster mistrust, evoke stereotype threat, and, through a number of mechanisms, lead to low intellectual performance. We next discuss some of these mechanisms.

MEDIATING MECHANISMS

Stereotype threat is best thought of as a predicament faced by a person in a situation. Given the range of possible situations, groups of people, and types

of stereotypes, it should come as no surprise that stereotypes can threaten people through multiple, possibly interacting, routes. We focus here on the affective, cognitive, and motivational mechanisms.

Arousal

As described earlier, when a Black or Latino college student takes a test, he faces an additional pressure not faced by his White classmates, a pressure related to the stereotypes about his group. This additional social-identity pressure, because it threatens central goals – feeling competent and appearing competent to others – can be nerve-wracking. Indeed it appears to be sufficiently unsettling to temporarily raise blood pressure (Blascovich et al., 2001). However, can this hypertension explain the lower intellectual performance found in this and other studies?

Although stereotypes increase blood pressure, this may not directly contribute to lower performance (Steele et al., 2002). It is more likely that high blood pressure is a reflection of the state of arousal and anxiety produced by stereotype pressure, and it is this arousal that does the mediating. Using the classic misattribution paradigm (e.g., Zanna & Cooper, 1974), Ben-Zeev and colleagues (2005) examined this proposition. As with the Inzlicht and Ben-Zeev (2000) study described earlier, women took a math test with either two men or two women. This time, however, half of the participants were also given the opportunity to attribute the negative arousal presumably triggered by threat to a benign source – in this case, a "silent" subliminal tone. As expected, when misattribution to the tone was not elicited, women in the minority environment performed worse on the math test than women in the same-sex environment. However, when given the opportunity to misattribute their arousal, women in the minority group performed as well as those in the same-sex group. That is, when participants were told that a subliminal noise might make them feel anxious, they no longer underperformed when they were in the minority, presumably because the arousal was attributed to the tone, rather than the more unsettling cause of low ability. Contending with negative stereotypes, therefore, can increase arousal, and the manner in which this arousal is attributed can play an important role in mediating minority underperformance. In other words, threatening environments may increase feelings of apprehension and stoke the fires of arousal, and it is this arousal that can contribute to intellectual underperformance (see also O'Brien & Crandall, 2003).

Cognitive Disruption

Coping with the negative stereotypes about her math ability may not only increase a woman's arousal, it can also leave her preoccupied with distracting thoughts and worries. When asked to answer a difficult question, she may begin focusing on task-irrelevant thoughts – worrying, say, about making her gender group look bad or about how much she hates math. And ultimately, these negative thoughts can contribute to her lower performance. Recently, a team of researchers looked at the types of thoughts women had when taking a math test under either threatening or nonthreatening environments (Cadinu, Maass, Rosabianca, & Kiesner, 2005). When women suspected that stereotypes were situationally relevant, they began thinking that math was too difficult for them or that they were no good at math. When stereotypes were not situationally relevant, however, they were unlikely to have these thoughts. Importantly, negative task-related thoughts interfered with test performance later on, and resulted in the former group of women performing worse than the latter group. Stereotypes, therefore, trigger a wave of intrusive domain-specific thoughts that are capable of inhibiting performance.

But how does this happen exactly? How do negative thoughts about math inhibit a woman's performance? Given the limits of cognition, it's possible that these negative thoughts divert her attention and reduce her cognitive capacity for the task at hand – answering the difficult question. More specifically, when worried about confirming a stereotype, these intrusive, negative thoughts can reduce working-memory capacity.

Working memory refers to that type of memory used to focus attention on temporarily activated information while keeping task-irrelevant thoughts at bay (Engle, 2002). It is also a key component of the higher-order cognitive operations underlying problem solving. Therefore, if working-memory capacity is occupied with disruptive thoughts, it will be less capable of handling a central task. Schmader and Johns (2003) examined this possibility in a series of elegant studies. In one study, female college students completed an operation-span task – an index of working memory – under either stereotype-threatening or -nonthreatening situations. In this dual-processing task, participants evaluated mathematical equations while memorizing words for later recall (e.g., Turner & Engle, 1989). As expected, when women suspected that their stigmatized social identity was situationally relevant, they showed less cognitive capacity than their nonthreatened counterparts, as measured by the number of words they recalled within the task. In a second study, Schmader and Johns not only

replicated this effect, but also found that this impaired capacity directly disrupted intellectual performance on a standardized test. Working-memory disruptions, therefore, can contribute to threat-induced intellectual underperformance.

Coping with stereotypes is hard; it leads people to have intrusive thoughts that drain the limited capacity of working memory. And the extent to which this happens determines the extent of intellectual impairment.

Motivational Mechanisms

New research shows that threatening environments not only limit working-memory capacity, but also self-regulatory capacity, which is analogous to the common-sense concept of willpower (Baumeister, Heatherton, & Tice, 1994). Getting out of bed in the morning, eating or drinking in moderation, and persisting on a difficult reading assignment are all examples of actions that require the self-regulatory capacity to inhibit one set of behaviors (e.g., pulling the covers over one's head, getting drunk, quitting), and replace them with more adaptive behaviors. Self-regulation is not always easy, however. Research is now beginning to reveal that people have only a limited supply of self-regulatory strength, and that any task requiring controlled, willful action quickly depletes this central resource. Factors that consume a person's strength, say coping with a stressful event, should contribute to self-regulation failure – a process known as "ego depletion" (Muraven & Baumeister, 2000; Muraven, Tice, & Baumeister, 1998).

Given this limited capacity, it should follow that dealing with the prospect of confirming a negative stereotype – a situation rife with arousal and disruptive thoughts – depletes self-regulatory capacity and leaves people less able to self-regulate in other domains. Inzlicht and colleagues explored this possibility. In one study (Inzlicht & Hickman, 2005), men and women were placed in either a minority-sex or same-sex "math focus group" and then asked to work for as long as they wished on an ostensibly unrelated anagram task. Results indicated that women in the minority, who were dealing with stereotype pressures, gave up more quickly on the anagram task than all other students. Other studies revealed that, compared to non-threatened Black students and women, respectively, stereotype-threatened Black students were less able to attentionally self-regulate, as measured by the color naming Stroop task, and threatened women were less able to physically self-regulate, as indexed by the amount of time they could hold on to a hand exerciser, a difficult and sometimes painful exercise (Inzlicht, McKay, et al., 2006). Stigma, therefore, is ego depleting.

Stereotypes can affect motivation a second way, by affecting the motivational frame with which people view situations. Recently, Seibt and Förster (2004) found that stereotype threat could change the regulatory focus of targets of negative stereotypes. That is, it could induce a motivational style characterized by prevention, avoidance, and risk aversion (Higgins, 1997). When dealing with potential prejudice, as is the case, say, for the Latino trying to solve a difficult question on the chalkboard, the negative stereotype is the reference point and avoiding it is the goal. Such a situation can induce a prevention focus state of vigilance and of wanting to avoid failures at all costs, and not a focus on promotion of desired goals (see also Keller & Dauenheimer, 2003). Although being vigilant for failure does not always reduce performance, it can lower engagement and intrinsic liking for a topic (Elliot & McGregor, 2001). These separate lines of research suggest that stigma leads not only to a qualitative change in motivational mind-set in which individuals interact with a situation – by, for example, inducing a prevention or performance avoidance focus – but also to a quantitative change in the amount of self-control people have at their disposal (e.g., Inzlicht, McKay et al., 2006).

Being the target of prejudice is a messy affair. It leads people to become anxious, introduces disruptive thoughts, and affects the quantity and quality of self-regulatory resources available. Stereotype threat, however, is most likely not mediated by one of these psychological processes operating alone, but rather through a complex interplay between them. We thus agree with the position offered by Steele and colleagues (2002) that being the target of stereotypes is a multifaceted phenomenon that varies from situation to situation, and person to person. We now turn to the variability found from person to person, by focusing on an important individual difference variable known as RS-race.

INDIVIDUAL DIFFERENCES

Although much of the research discussed earlier focuses on between-group differences in performance situations and performance outcomes, it is important to recognize that not all members of stigmatized groups experience anxiety or cognitive disruption in contexts where their identity may be threatened. One mechanism through which within-group variability may occur is through individual differences in how well a particular protective mechanism can be enacted in the face of threat (e.g., Inzlicht, Aronson et al., 2006). Another possibility, however, is that some people within a

stigmatized group may not be as reactive to the identity-threat cues in the environment to begin with.

How might such individual differences come about? Drawing on models emphasizing the importance of prior experiences in shaping future expectations (e.g., Bowlby, 1988; Downey & Feldman, 1996), Mendoza-Denton and colleagues (Mendoza-Denton et al., 2002; Mendoza-Denton, Page-Gould, and Pietrzak, 2005) have proposed that prior experiences of mistreatment, prejudice, and discrimination can make the possibility of future rejection on the basis of a stigmatized characteristic more chronically accessible to a person (Higgins, 1997). In other words, the more one has experienced discrimination in the past, either personally or vicariously, the more likely one is to fear being discriminated against in the future (see also Pinel, 1999). Individual differences in RS-race have been found to be important in explaining within-group variability in educational outcomes and, importantly, to begin to shed light on yet another mechanism through which stigmatization can lead to performance decrements.

Mendoza-Denton et al. (2002) conducted a longitudinal study of incoming African-American students within a university setting. The researchers measured RS-race before students' first day of classes at the university. Over the first 3 weeks of college, students who scored high on RS-race felt less a part of the university community, less liking for their majority peers, and less trust in professors relative to their low RS-race counterparts. At the end of the first year of college, high RS-race students accorded less legitimacy toward (i.e., felt less trust in and obligation to) the university, an effect that was mediated by students' initial feelings of belonging during the first few weeks of school (Mendoza-Denton, 2003). By students' second and third years in college, RS-race was negatively predictive of attendance at review sessions and use of professors' office hours, as well as grade point average (GPA).

These findings highlight that in addition to arousal, cognitive disruption, and motivational depletion – which can affect performance in specific evaluative situations – concerns about stigmatization can lead to longer-term performance decrements through an alternative pathway. As the work with RS-race shows, when students feel unwelcome and devalued, they may be less likely to trust representatives of the university (e.g., professors, university officials), and feel a reduced sense of obligation to the university. As a coping strategy, students may then decide to avoid office hours, study sessions, and other institutionalized opportunities to help overcome the academic difficulties all students experience (see also Aronson & Inzlicht, 2004).

Individual Differences in Context

Two clear messages emerge from our discussion so far: The first is that stigma-related threat processes are best understood as a situational predicament, such that altering the elements of context or environment should increase or reduce such threat. The second message is that within stigmatized groups, people differ in the chronic accessibility of discrimination expectations. Recognizing a common focus on process, the question becomes not "person or situation?" but rather "which person and when situation?"

Recent research has begun to clarify the conditions under which we might expect to see "the power of the situation" (Ross and Nisbett, 1991) versus individual differences emerge as the primary determinant of behavior in stereotype-threat situations. Going back to an earlier example, seeing thousands of copies of anti-Jewish literature prominently on display at an airport is a situation that is likely to elicit belonging (and safety) concerns among most of the people against whom the hate is directed. The majority of stigma-relevant situations, however, are likely to be much less clear, particularly in modern times when overt discrimination has gone underground, at least in the United States (McConahay, 1986). It is precisely in such ambiguous situations that one might expect chronic individual differences to emerge as predictors of behavior.

To test this idea, Mendoza-Denton, Shaw-Taylor, Chen and Chang (2009) asked female college students to participate in a graduate-school interview with a male graduate student. The décor of the graduate student's room was experimentally manipulated: In one condition, posters of bikini models and books with sexist themes strongly suggested the man was chauvinist, while in the other condition, the décor of his office was innocuous. The findings were clear: Whereas all women expected to be negatively stereotyped in the chauvinist décor condition, only women who were high on gender-based rejection sensitivity (RS-gender) (London, Downey, Rattan, & Velilla, 2003) experienced such expectations in the innocuous-décor condition. In other words, although the evaluative nature of an interview created the potential for negative evaluation in both conditions, the condition in which the graduate student was not overtly chauvinist was ambiguous with respect to whether gender might play a role in any such evaluation – thus allowing an individual a difference variable (RS-gender) to affect behavior.

Does this mean that individuals for whom discrimination is chronically accessible – for example, women high on RS-gender or minority individuals

high on RS-race – are likely to perceive rejection across all contexts, seeing the world through "stigma-colored glasses?" Evidence suggests that this is not the case. As research both on stereotype threat and status-based rejection sensitivity shows, threat is activated only in the presence of an applicable discrimination-relevant cue in the situation. In the *absence* of such cues, people will not react with anxiety, cognitive disruption, or mistrust. Brown and Pinel (2003), for example, find that when a math test is framed as completely free of gender bias, all women – regardless of their chronic accessibility of gender stigmatization (stigma consciousness) (Pinel, 1999) – performed well on the exam. Taken together, then, the aforementioned findings suggest that rather than focusing on whether stigma-related threat is a situational predicament or a personal disposition, both the *applicability* and *strength* of stereotype-/discrimination-related cues in a given context are critical in understanding whether the dynamic illustrated in Figure 1.1 is activated, and in whom it is activated.

COPING WITH THREAT: EFFECTS ON THE SELF

Although less researched than performance effects of prejudice, identity-coping strategies have been documented among students when their devalued social identities are challenged by cultural stereotypes, mistrust, or other threats to belonging.

Disengagement and Disidentification

The most extreme and costly of these strategies are disengagement and disidentification, in which individuals reduce the degree to which they invest self-esteem into a particular domain (Steele, 1997; Crocker et al., 1998). These adaptations reflect a strong desire for self-esteem in the face of a situation where one's prospects for full acceptance or belonging are seen as either unattainable or simply not worth the effort. By disengaging, we refer to the early disconnecting of esteem from a particular threatening domain. This way one can maintain physical presence in a domain where positive outcomes are unlikely or tenuous, in essence, by reformulating one's priorities. In contrast, we use the term disidentification to mean the more chronic coping strategy of dropping a domain from personal identity or as a foundation for self-esteem (Crocker et al., 1998). Individuals who disidentify, in essence, no longer care about the threatened domain. The research suggests that individuals are quite adept at employing the Jamesian calculus: maintaining global self-esteem by dropping or reducing the importance of

certain problematic "pretensions," in this case, academic achievement (see also Crocker & Knight, 2005).

One would reasonably expect that groups that are most severely under-represented and most acutely stereotyped would also come to be the least academically identified. The literature on African-American males who fit this description strongly suggests this linkage. For example, numerous studies find a lower correlation between self-esteem and academic achievement for Black males (e.g., Demo & Parker, 1987) despite finding that Black males do not differ from other groups in overall self-esteem. In a cross national study employing the National Educational Longitudinal Survey (NELS), Osborne (1995, 1997) found that despite being enrolled and physically present in high school, African-American boys reduced their identification with academic achievement steadily between the 8th and 12th grades, a trend remarkably more pronounced than for Black females, whose identification with achievement more closely resembled that of Whites. Indeed, by the 12th grade, Black males in the sample were completely disidentified; in fact, there was a negative correlation between self-esteem and academics. This finding offers some support for the cultural inversion hypothesis, which holds that African-Americans cope with their marginalized status by defining themselves in opposition to the prevailing White culture (e.g., Fordham & Ogbu, 1986). But the effect seems limited to African-American males, at least in regard to academics.

Research by Hare (1977) and Osborne (1997) suggests that global self-esteem is maintained among African-American students by basing their self-esteem not on schooling but instead primarily on family and peer relations. White students in their research appeared to base their self-esteem primarily on school and, to a lesser extent, on family and peer interactions. These differences in self-definition have been observed even among students at highly elite universities. For example, Aronson, Fried, and Good (2002) asked African-American and White undergraduates at Stanford University how central academic achievement was to their self-definitions. Even after controlling for achievement and preparation, the Black–White difference was significant, with White students rating achievement as more important to making them "who I am as a person." In the same sample of students, Steele and Aronson (1995) found that African-Americans were more likely than Whites to rate peer relations as personally important, and this was particularly likely when they were confronted by a challenging and evaluative academic task. Thus, although theorists in this area have suggested that disidentification is likely to be an avenue of last resort, evidence that it occurs frequently is easy to come by. Psychological disidentification

of this sort is thought to be maladaptive because reducing identification with academic achievement is likely to reduce effort and learning (Steele, 1997). Fortunately, interventions that mitigate disengagement and disidentification have been shown to boost academic achievement (Aronson, et al., 2002).

A subtler and thus more adaptive form of self-concept adjustment and coping occurs when an individual selectively disidentifies with either aspects of the domain or characteristics stereotypically associated with the minority group. For example, women majoring in math and science might alter their dress or behavior to avoid being pegged as overly feminine, and thus face less intense suspicions about their fitness for the major. As another example, Pronin, Steele, and Ross (2004) found that female college students who had taken a number of math courses rated certain female characteristics – like flirtatiousness or the desire to have children – as less self-defining than others, presumably because these characteristics were seen as incompatible with future math success. These women did not disavow female traits like empathy and nurturance, because these were not seen as incompatible with success in math. Moreover, Pronin et al. found essentially the same results in experimental studies. In their experiments women who strongly identified with math distanced themselves from characteristically feminine traits seen as irrelevant to math prowess (flirtatiousness, emotionality, wearing make-up, etc.) when threatened with information suggesting that women were less naturally gifted in math than men. Women who were less identified with math did not show this "identity bifurcation" response to stereotype threat. Thus, students who suspect that certain traits are stigmatized in a domain may feel considerable pressure, induced by social-identity threat, to modify their self-definitions. Such modifications presumably allow them to reduce the relevance of stereotypes; they can acknowledge the existence and validity of the stereotype yet simultaneously escape its more damning implications by creatively reconstruing their self-concepts.

Rejection Sensitivity, Self-Knowledge, and Self-Efficacy

As reviewed earlier, some targets of discrimination are significantly more prone than others to expect, perceive, and be psychologically bothered by stereotypes impugning their group's academic competence – an individual difference known as status-based rejection sensitivity (e.g., RS-race; cf. Pinel, 1999). It is presumed that RS-race is itself a self-concept coping response to prejudice, one that is partly an adaptation to either past or anticipated negative treatment. Chronic expectations of prejudice can have both negative

and positive effects. For example, those individuals who are high in RS-race perform worse on tests framed as measures of ability (Aronson & Inzlicht, 2004) and have greater difficulty adjusting to college (Mendoza-Denton et al., 2002). At the same time, attributing negative outcomes to prejudice can buttress self-esteem. Crocker et al. (1991) have found, for example, that the self-esteem of stereotype targets is generally unaffected by negative performance feedback, particularly when there are objective grounds to suspect that prejudice is possible, such as when students know the evaluator to be aware of their race or gender.

More recent research (Aronson & Inzlicht, 2004) has revealed two further effects of RS-race among African-American college students. First, high RS-race students were far less sensitive to their actual strengths and weaknesses when evaluating their own academic performances than were low RS-race students. Specifically, all other things being equal, Black students with high RS-race scores were less able than their low RS-race counterparts to correctly estimate the number of items solved on a laboratory task a few minutes after completing it. Second, they were far less stable over time in their academic self-efficacy (Bandura, 1977) or their confidence in their abilities to achieve, learn, and accomplish important academic tasks. A diary study in which they reported their self-efficacy twice daily for 8 days revealed them to be to be riding a virtual rollercoaster of self-confidence, extremely high in confidence at one point in time, and extremely low in confidence a few hours later. In contrast, low RS-race students were far more stable in their self-efficacy, showing less sensitivity to the vagaries of academic life. Thus, suspicion about racial prejudice can significantly predict one's self-perceived academic ability. Both effects – miscalibration and temporal instability – suggest a lack of academic self-knowledge on the part of high RS-race students.

There is a clear parallel here with work on unstable self-esteem. Two studies (Kernis, Cornell, Sun, Berry, & Harlow, 1993; Campbell, 1990) find that unstable self-esteem is associated with an unclear self-concept. Importantly, Kernis et al's research shows that individuals with unstable self-esteem are highly influenced by external feedback; they respond more favorably to positive and more defensively to negative feedback than do individuals with stable, firmly grounded self-esteem. And they experience the rollercoaster-like effects of positive and negative feedback. Thus, given the parallel findings, it seems reasonable to make the same argument for the stability of academic self-efficacy: Clarity and stability go hand in hand. How exactly RS-race creates this lack of clarity remains to be established, but one possibility is that the link between prior discrimination and stability/

calibration is mediated by how much a person feels able to trust feedback about the self as veridical and valuable.

REMEDIATION OF THREAT: SOCIETAL ADJUSTMENTS

In this chapter, we've discussed how stigma can hurt, threaten, and impede. But what can we do to help people overcome these threats? How can we neutralize threats present in the environment? There is increasing evidence from both laboratory and field studies that the decrements in performance engendered by social-identity threat can be overcome with careful attention to how tasks are framed and to what students can be taught.

As the foregoing discussion should make clear, minority status is a reality: Some groups will always be underrepresented. Yet many studies show that minority status need not result in stereotype threat, which, as indicated in the preceding text, can impair academic achievement. For example, simply having the person administering the exam be of the same race or gender as the test-taker can reduce the test score differential between minority and the majority students (Marx & Roman, 2002; Marx & Goff, 2005). Famous interventions such as the "jigsaw classroom" (e.g., Aronson & Patnoe, 1997) and Treisman's Emerging Scholars Program (e.g., College Board, 2001) show that classroom cooperation and group work can improve minority student's performance by perhaps alleviating social-identity threat. In The jigsaw classroom, lessons are broken up into several pieces and one piece is distributed to each member of the group who must learn the material and teach it to the others. To perform well, therefore, students must cooperate, because the piece of the puzzle held by each student is vital to everyone's successful learning. Studies show that the technique typically raises the minority students' grades (by about one letter grade), raises their self-esteem, increases friendships between ethnic group members, and leads to greater enjoyment among students of all backgrounds. To the extent that the academic underperformance and self-concept effects seen in real classrooms are partially produced by social-identity threat, the jigsaw technique may be particularly helpful to minority students. In Treisman's program, there is also cooperative group study outside of class in special homework sessions, but the cooperation is not as rigidly structured as jigsaw. Moreover, the work is very challenging, going beyond what is covered in class. Treisman's program lifted the African-American students' achievement to surprising levels; they earned grades as high as the Asian students in the class. Recent research by Rosenthal and Crisp (2006) suggests that one can easily create the kind

of communal mind-set that these interventions enjoy in surprisingly easy ways. They found that simply having women list a handful of ways that men and women are similar before taking a math test raised women's test performance and eliminated the classic stereotype threat effect.

Two recent studies suggest that people's awareness of their susceptibility to social-identity threat can reduce the negative effects, presumably by helping them make more situational (and thus anxiety-reducing) attributions for their difficulties. Simply informing students about the dynamics of stereotype threat before being tested improved the test scores of both African-American college students taking a verbal test (Aronson & Williams, 2004) and female college students taking a math test (Johns, Schmader, & Martens, 2005). Inspired by the research of Carol Dweck (e.g., Dweck, 1999), Aronson and colleagues have conducted several studies showing that framing tests as measuring improvable dimensions (as opposed to nonimprovable ones) appears to reduce the effects of stereotype threat. This has been demonstrated both in laboratory studies in which tests are presented as measuring malleable versus fixed skills, and in interventions in which students are taught to see all academic abilities as highly learnable. The results are consistent across studies: Students score better on evaluative tests and get better grades when they are led to see their abilities as malleable as opposed to fixed (Aronson, 1999; Aronson et al., 2002; Good, Aronson, & Inzlicht, 2003).

CONCLUSION

In the past 15 years, social psychological research on prejudice and discrimination has started focusing on the plight of the target. During this time, research has taught us that stigma has a far-ranging effect on its target. By focusing on a model of threatening environments, we have provided a framework in which to understand this research and to stimulate further research. The bottom line is that environmental cues, which on the surface appear benign, can communicate social devaluation and exclusion. When this message is received it can result in underperformance, mistrust, disidentification, and self-unclarity. Some people are particularly sensitive to stigma-relevant cues and experience the full brunt of social-identity threat as a result. The good news is that the effects of stigma can be mitigated and that there is much that educators and policy makers can do to help. Once this is done, we may be able to inoculate students against prejudice and create resilience among individuals belonging to socially devalued groups.

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