THE SOCIAL PSYCHOLOGY OF STIGMA

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■ **Abstract**   This chapter addresses the psychological effects of social stigma. Stigma directly affects the stigmatized via mechanisms of discrimination, expectancy confirmation, and automatic stereotype activation, and indirectly via threats to personal and social identity. We review and organize recent theory and empirical research within an identity threat model of stigma. This model posits that situational cues, collective representations of one's stigma status, and personal beliefs and motives shape appraisals of the significance of stigma-relevant situations for well-being. Identity threat results when stigma-relevant stressors are appraised as potentially harmful to one's social identity and as exceeding one's coping resources. Identity threat creates involuntary stress responses and motivates attempts at threat reduction through coping strategies. Stress responses and coping efforts affect important outcomes such as self-esteem, academic achievement, and health. Identity threat perspectives help to explain the tremendous variability across people, groups, and situations in responses to stigma.

CONTENTS

INTRODUCTION

Stigma is a powerful phenomenon with far-ranging effects on its targets (Crocker et al. 1998, Jones et al. 1984, Link & Phelan 2001). Stigma has been linked to poor mental health, physical illness, academic underachievement, infant mortality, low social status, poverty, and reduced access to housing, education, and jobs (Allison 1998, Braddock & McPartland 1987, Clark et al. 1999, Yinger 1994). Although psychologists have long been interested in the causes of stereotyping, prejudice, and discrimination, only recently have they focused in earnest on understanding the psychological effects of these processes.

The roots of contemporary perspectives on stigma can be traced to Erving Goffman's (1963) classic book *Stigma*: *Notes on the Management of a Spoiled Identity*. In the 1980s, theory and research began to challenge traditional perspectives on how stigma affects self-esteem (Crocker & Major 1989) and academic performance (Steele 1992, Steele & Aronson 1995), among other outcomes (Jones et al. 1984). This emphasis on the situational nature of stigma and the role of the self in responses to stigma stimulated an explosion of research. PsychInfo reveals a dramatic increase in the number of articles that mention stigma published in the period from 1965–1989 (N = 603) as compared to 1990–2004 (N = 2321).

Reflecting the vibrancy of this growing field, review chapters on stigma and related processes appeared recently in the *Handbook of Social Psychology* (Crocker et al. 1998), *Advances in Experimental Social Psychology* (Major et al. 2002b, Steele et al. 2002), *European Review of Social Psychology* (Major et al. 2003b, Schmitt & Branscombe 2002, Stangor et al. 2003b), and the *Annual Review of Sociology* (Link & Phelan 2001). This chapter is the first on stigma to appear in the *Annual Review of Psychology*. Because of space restrictions, we were unable to review several important areas of research, such as the functions of stigma, the impact of stigma on social interaction, and the ways in which different characteristics of stigma (e.g., controllability, concealability, and entitativity) differentially influence psychological and behavioral reactions to those stigmas (see Crocker et al. 1998). We focus here on what stigma is, and how it affects the thoughts, feelings, behavior, and health of its targets.

CONCEPTUALIZING STIGMA

According to Goffman (1963, p. 3), stigma is an attribute that extensively discredits an individual, reducing him or her "from a whole and usual person to a tainted, discounted one." Crocker et al. (1998) proposed that stigmatization occurs when a person possesses (or is believed to possess) "some attribute or characteristic that

conveys a social identity that is devalued in a particular social context" (p. 505). These definitions share the assumption that people who are stigmatized have (or are believed to have) an attribute that marks them as different and leads them to be devalued in the eyes of others. Stigmatizing marks may be visible or invisible, controllable or uncontrollable, and linked to appearance (e.g., a physical deformity), behavior (e.g., child abuser), or group membership (e.g., African American). Importantly, stigma is relationship- and context-specific; it does not reside in the person but in a social context.

In stigmatization, "marks" become associated with "discrediting dispositions"—negative evaluations and stereotypes (Jones et al. 1984). These stereotypes and evaluations are generally widely shared and well known among members of a culture (Crocker et al. 1998, Steele 1997), and they become a basis for excluding or avoiding members of the stereotyped category (Leary & Schreindorfer 1998, Major & Eccleston 2004). Although both powerful and powerless groups may stereotype and negatively evaluate the other, because the former control access to resources, their beliefs are likely to prevail (Fiske 1993, Link & Phelan 2001). Furthermore, members of high-status and low-status groups enter situations with different understandings of the position of their group in the larger society. Thus, members of high-status and low-status groups are likely to respond in dramatically different ways to being the target of negative stereotypes and/or discrimination, even though the immediate situation seems the same (Branscombe 1998, Inzlicht & Ben-Zeev 2000, Schmitt & Branscombe 2002, Schmitt et al. 2002, Sekaquaptewa & Thompson 2002). Without reference to power, the stigma concept becomes overly broad. In short, stigma exists when labeling, negative stereotyping, exclusion, discrimination, and low status co-occur in a power situation that allows these processes to unfold (Link & Phelan 2001). Although each of these terms is often used interchangeably with stigma, stigma is a broader and more inclusive concept than any one of these processes.

Most stigma scholars regard stigma as a social construction—a label attached by society—and point to variability across time and cultures in what attributes, behaviors, or groups are stigmatized (Crocker et al. 1998, Jones et al. 1984). Evolutionary scholars, however, point to commonality across cultures in what attributes are stigmatized. They propose that in order to avoid the potential pitfalls that accompany group living, humans have developed cognitive adaptations that cause them to exclude (stigmatize) people who possess (or are believed to possess) certain attributes. These are attributes that signal that (*a*) they are a poor partner for social exchange (e.g., a convict), (*b*) they might carry parasitic infection (e.g., a physical deformity), or (*c*) they are a member of an outgroup that can be exploited for ingroup gain (Kurzban & Leary 2001; see also Neuberg et al. 2000, Park et al. 2003). These three categories for exclusion map closely onto the categories of stigmatizing attributes proposed by Goffman (1963): blemishes of individual character, abominations of the body, and tribal stigma. Even if there are evolved mechanisms that precipitate exclusion of certain social categories across cultures, however, cultural beliefs can dictate which attributes within those categories are

stigmatized and the specific content of the stereotypes that are attached to those attributes (Park et al. 2003). Nonetheless, stigmatized groups tend to be negatively stereotyped on the dimensions of competence and/or warmth in most cultures (Fiske 1998). Stereotyping people along these two dimensions may be functional; in order to survive, people need to know who is friend or foe (warmth) and who has higher status (competence).

MECHANISMS OF STIGMATIZATION

In the following section, we describe four mechanisms by which stigma affects the stigmatized: (*a*) negative treatment and direct discrimination, (*b*) expectancy confirmation processes, (*c*) automatic stereotype activation, and (*d*) identity threat processes.

Negative Treatment and Discrimination

By limiting access to important life domains, discrimination directly affects the social status, psychological well-being, and physical health of the stigmatized. Members of stigmatized groups are discriminated against in the housing market, workplace, educational settings, health care, and the criminal justice system (Crandall & Eshleman 2003; for an overview see Sidanius & Pratto 1999). They are even discriminated against in the family. The parents of heavyweight women, for example, are less likely to pay for their daughter's college education than are the parents of average-weight women (Crandall 1995). Older adults are patronized by younger adults and discriminated against in the workplace (Nelson 2002). The low social status that results from discrimination may, in turn, engender further discrimination (Link & Phelan 2001). Accumulated institutional practices may also work to the disadvantage of the stigmatized even in the absence of individual prejudice or discrimination. For example, the practice of funding school districts through property taxes perpetuates educational disparities between whites and stigmatized ethnic minority groups in the United States (Sidanius & Pratto 1999).

Expectancy Confirmation Processes

Stigma also affects the stigmatized via expectancy confirmation processes, or self-fulfilling prophecies (Jussim et al. 2000). Perceivers' negative stereotypes and expectations can lead them to behave toward stigmatized targets in ways that directly affect the targets' thoughts, feelings, and behaviors. The targets' behavior may then confirm the initial, erroneous, expectation (Darley & Fazio 1980, Deaux & Major 1987, Jussim et al. 2000) and even lead to expectancy-consistent changes in the targets' self-perceptions (Fazio et al. 1981). The target need not be aware of others' expectations, stereotypes, or prejudicial attitudes for this process to unfold (e.g., Snyder et al. 1977, Vorauer & Kumhyr 2001). Studies examining expectancy effects among actual stigmatized groups are rare. The few that have

done so suggest that expectancy confirmation processes may be exacerbated when the targets actually are members of stigmatized groups (Harris et al. 1992, Jussim et al. 1996, McKown & Weinstein 2002).

Automatic Stereotype Activation-Behavior

Stigma may also affect the stigmatized via the automatic activation of negative in-group stereotypes. Dominant cultural stereotypes of groups in society are widely known (Steele 1997) and can affect behavior in the absence of discriminatory behavior on the part of others, and even when no other person is present in the immediate situation. Knowledge of cultural stereotypes may affect behavior through ideomotor processes (see Wheeler & Petty 2001 for a review). Because of associative linkages in memory between stereotypes and the behaviors they imply, activation of stereotypes can automatically lead to behavior that assimilates to the stereotype (Bargh et al. 1996, Dijksterhuis et al. 2000). For this process to occur, the person must be aware of the contents of the stereotype, the stereotype must be activated in a situation, and the stereotype must be applicable to the behavioral domain. Activating cultural stereotypes of stigmatized groups can produce stereotype-consistent behavior even among people who are not members of the group, as long as they are aware of the stereotype. For example, white Americans for whom the African American stereotype was activated performed more poorly on an intellectual task than did white Americans for whom this stereotype was not activated (Wheeler et al. 2001).

Activating stereotypes of the stigmatized, however, is more likely to result in stereotype-consistent behavior among the stigmatized than the nonstigmatized for several reasons. First, self-relevant stereotypes are more likely to be chronically accessible than non-self-relevant stereotypes, resulting in a lowered threshold of activation for the former (Shih et al. 2002). Subliminally presented primes, for example, lead to stereotype-consistent behavior in the target group but not in nontarget groups (Levy 1996, Shih et al. 2002). Second, the same situation may prime negative stereotypes for the stigmatized, but not for the nonstigmatized. The mere act of indicating their race before taking a standardized test, for example, decreased test performance among African Americans but not among white Americans (Steele & Aronson 1995, Study 4). Finally, although the explanation is unclear, situations that activate negative stereotypes and harm performance among stigmatized group members sometimes elevate performance among members of nonstigmatized groups (Walton & Cohen 2003).

Stigma as Identity Threat

Contemporary perspectives on stigma emphasize the extent to which stigma's effects are mediated through targets' understanding of how others view them, their interpretations of social contexts, and their motives and goals. These theories are "top down" in their emphasis on how people's construals of their environment and self-relevant motives (e.g., self-esteem protection) shape their emotions, beliefs,

and behavior. They are also "bottom up" in their assumption that construals emerge from experiences (direct or vicarious) with being a target of negative stereotypes and discrimination. These perspectives assume that stigma puts a person at risk of experiencing threats to his or her social identity. Crocker & Major (1989, Crocker et al. 1998), for example, hypothesized that stigmatization threatens self-esteem (personal and collective), and can lead to attributional ambiguity, i.e., uncertainty as to whether outcomes are due to one's personal identity or social identity. Steele (1997, Steele & Aronson 1995) theorized that negative self-relevant group stereo-types can lead to stereotype threat, a situationally based fear that one will be judged on the basis of or confirm those stereotypes. Steele et al. (2002) hypothesized that cultural knowledge or situational cues that indicate one's group is devalued, marginalized, and of low status lead to social identity threat, i.e., a threat to the aspect of self that is derived from membership in a devalued social group or cate-gory (Tajfel & Turner 1986). Identity threat theories dominate current research on stigma. In the following sections, we review research generated by these theories (for related reviews, see Crocker et al. 1998; Major et al. 2002b, 2003b; Schmitt & Branscombe 2002; Stangor et al. 2002; and Steele et al. 2002).

A MODEL OF STIGMA-INDUCED IDENTITY THREAT

Figure 1 presents a model that integrates identity threat models of stigma (e.g., Crocker et al. 1998, Major et al. 2002b, Steele et al. 2002) with transactional models of stress and coping (e.g., Lazarus & Folkman 1984, Smith 1991). This model assumes that possessing a consensually devalued social identity (a stigma) increases one's exposure to potentially stressful (identity-threatening) situations. Collective representations (*box A*), immediate situational cues (*box B*), and per-sonal characteristics (*box C*) affect people's appraisals of the significance of those situations for their well-being. Identity threat (*box D*) results when an individual
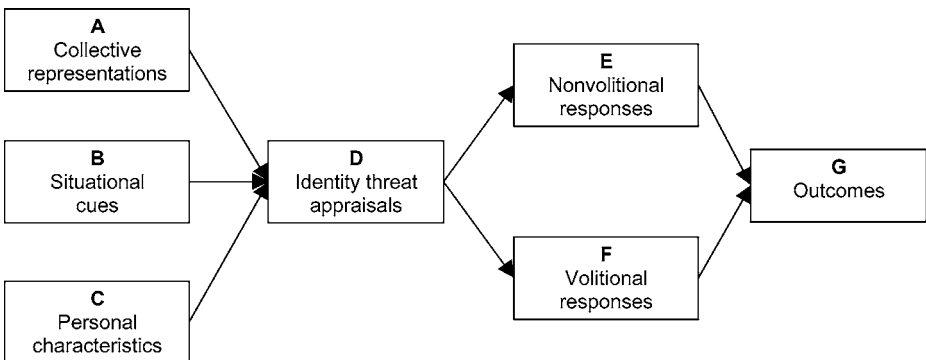

Figure 1   An identity-threat model of stigma.

appraises the demands imposed by a stigma-relevant stressor as potentially harmful to his or her social identity, and as exceeding his or her resources to cope with those demands. Responses to identity threat can be involuntary (e.g., anxiety, increased vigilance, and working memory load) (*box E*) or voluntary (e.g., coping efforts; *box F*). Involuntary stress responses are emotional, cognitive, physiological, and behavioral responses that do not serve to regulate or modify stressful experiences. Voluntary responses, or coping, refer to conscious, volitional efforts to regulate emotion, cognition, behavior, physiology, and the environment in response to events or circumstances appraised as stressful (Compas et al. 1999). Both involuntary and voluntary responses can be distinguished from the outcomes of those responses, such as self-esteem, academic achievement, and health (*box G*). Although not drawn, this model is recursive, in that involuntary and voluntary responses to identity threat may furnish feedback that affects objective circumstances as well as subjective construals and appraisals of those circumstances. These may attenuate or exacerbate the effects of stigma. In the following section, we use this framework to organize and review recent literature on stigma.

Collective Representations

Based on their prior experiences as well as their exposure to the dominant culture, members of stigmatized groups develop shared understandings of the dominant view of their stigmatized status in society (Crocker 1999, Crocker et al. 1998, Steele 1997). These collective representations include awareness that they are devalued in the eyes of others, knowledge of the dominant cultural stereotypes of their stigmatized identity, and recognition that they could be victims of discrimination (Crocker et al. 1998). Virtually all members of a culture, including members of stigmatized groups, are aware of cultural stereotypes, even if they do not personally endorse them (Steele 1997). By 10 years of age, most children are aware of cultural stereotypes of different groups in society, and children who are members of stigmatized groups are aware of cultural stereotypes at an even younger age (McKown & Weinstein 2003). Members of a culture also are aware of the dominant ideologies, or shared explanations, for why different groups occupy the status positions that they do (Jost & Banaji 1994, Sidanius & Pratto 1999). Collective representations influence how the stigmatized perceive and appraise stigma-relevant situations. Collective representations can affect the behavior of the stigmatized in the absence of obvious forms of discriminatory behavior on the part of others, and even when no other person is present in the immediate situation.

Situational Cues

Situations differ in their social identity threat potential, i.e., in the extent to which they signal that one is at risk of being devalued, negatively stereotyped, or discriminated against because of one's social identity (Steele et al. 2002). For ability-stigmatized groups, threatening situations include taking an ability diagnostic test (e.g., Spencer et al. 1999, Steele & Aronson 1995), being outnumbered by

members of nonstigmatized groups (Ben-Zeev et al. 2004, Inzlicht & Good 2004, Sekaquaptewa & Thompson 2003), being taught by an instructor who is a member of a dominant outgroup (Marx & Roman 2002), being exposed to media images that reinforce negative stereotypes of one's group (Davies et al. 2002), being asked to reveal a concealable stigma (Quinn et al. 2004), or overhearing that an evaluator is sexist (Major et al. 2003c).

Because the collective representations that individuals bring to a situation shape its meaning, the same situation may be perceived and appraised differently by different individuals. For example, situational cues that increased the relevance of negative group stereotypes lead to stereotype threat effects (e.g., impaired performance) among children old enough to be aware of negative stereotypes about their group, but not among stigmatized children as yet unaware of group stereotypes (McKown & Weinstein 2003), and to impaired performance on a math test among women who believe that gender stereotypes about math ability are true, but not among women who reject these stereotypes (Schmader et al. 2004). Nonstigmatized and stigmatized groups in particular react very differently to the same local situation, in part because they differ in the collective representations they bring to the situation.

It is important to note that perceptions of situations do not always correspond to objective events (see Crosby 1982, Feldman-Barrett & Swim 1998, Stangor et al. 2003a). Some individuals who are targets of objective discrimination, for example, fail to realize it, whereas other individuals believe they are victims of discrimination even when they are not (Major et al. 2002b, Stangor et al. 2003b). A variety of personal, situational, and structural factors determine whether people perceive themselves as targets of prejudice. For example, individuals are more likely to perceive discrimination (*a*) against their group as a whole than against themselves personally (Crosby 1982, Taylor et al. 1994), (*b*) when information is presented aggregated across members of a group than on a case-by-case basis (Crosby et al. 1989), and (*c*) when prejudice cues are clear rather than ambiguous (Major et al. 2003c).

Personal Characteristics

Individual characteristics also influence how situations are perceived and appraised. Following, we describe several personal characteristics that have been the focus of research.

STIGMA SENSITIVITY   Individuals differ in their chronic sensitivity to being stigmatized. People who expect to be treated on the basis of their group membership rather than their personal identity (Pinel 1999) and/or who are sensitive to rejection based on their group membership (Mendoza-Denton et al. 2002) are more vigilant for stigma-related threats, and are more likely to appraise stigma-relevant situations as threatening. For example, the higher people score on a measure of stigma-consciousness, the more likely they are to perceive themselves as targets

of discrimination at both a personal and group level (Pinel 1999), the more they expect to be treated negatively by outgroup members (Pinel 2002), and the more attention they allocate to subliminally presented words that threaten their social identity (CR Kaiser, SB Vick, B Major, submitted, Study 2). African American students who scored high on a measure of race-rejection sensitivity prior to college were more likely than those who scored low on this measure to perceive negative race-related experiences and discrimination over the course of their first three weeks in college, felt more negatively toward their roommates and professors, and were less likely to feel accepted at college (Mendoza-Denton et al. 2002).

GROUP IDENTIFICATION   Individuals who regard their stigmatized social identity as a central part of their self-identity are more likely to see themselves as targets of personal and group discrimination (e.g., Branscombe et al. 1999, Sellers & Shelton 2003), especially when prejudice cues are attributionally ambiguous (Major et al. 2003c, Operario & Fiske 2001). They are also more likely to appraise stigma-relevant events as self-relevant. Consequently, they report increased threat and lower self-esteem in response to perceived prejudice against the ingroup (McCoy & Major 2003) and perform more poorly in situations where the ingroup is negatively stereotyped (Schmader 2002).

DOMAIN IDENTIFICATION   Individuals who strongly identify with domains in which their group is negatively stereotyped are more likely to regard performance feedback in those domains as self-relevant, increasing their potential for experiencing identity threat (Aronson et al. 1999, Steele et al. 2002). For example, African American students who regarded their performance on intellectual tests as central to their self-regard reported lower self-esteem following poor performance feedback compared to those who were less domain identified (Major et al. 1998).

GOALS AND MOTIVES   Individuals' goals and motives also shape how they perceive and appraise situations. Two motives have been emphasized in the stigma literature. One is the motive to protect or enhance self-esteem. People are more likely to perceive an evaluator as sexist or racist if they receive negative than positive feedback from him or her (e.g., Crocker et al. 1991). People are also motivated to believe the system is just and that they are fairly treated (Jost & Major 2001, Jost et al. 2003, Major 1994). In the service of maintaining these beliefs, members of stigmatized groups may fail to see themselves as victims of prejudice even in the presence of prejudice cues. The more strongly members of stigmatized ethnic groups (Latino/a Americans, African Americans) believe in a just world and that any individual can get ahead regardless of group membership, the less likely they are to report that they personally, or members of their group, are targets of ethnic discrimination, the less likely they are to blame discrimination when a member of a higher status group (e.g., a European American) rejects them for a desirable role (Major et al. 2002a, Study 2), and the more threat and lower self-esteem they

report when they are confronted with prejudice against themselves or their group
(B Major, CR Kaiser, SK McCoy, submitted).

Identity Threat Appraisals

The centerpiece assumption of transactional stress and coping models is that events
are appraised for their significance for well-being, and that the outcome of this ap-
praisal process directs affective, cognitive, behavioral, and physiological responses
to that event (Smith 1991). Appraisals include primary appraisals of the demands
posed by a stressor (e.g., the extent to which it is perceived as self-relevant, dan-
gerous, effortful, and creates uncertainty) and secondary appraisals of resources
to cope with those demands (Lazarus & Folkman 1984). Threat results when the
perceived demands of a self-relevant situation are appraised as exceeding one's
perceived resources to meet those demands. Challenge results when perceived cop-
ing resources are appraised as exceeding demands (Blascovich & Tomaka 1996).
Stigma-induced identity threat results when an individual appraises the demands
imposed by a stigma-relevant stressor as potentially harmful to his or her social
identity, and as exceeding his or her resources to cope with those demands. This ap-
praisal results from an interaction between perceived cues (affective or semantic)
in the immediate situation that make stigma relevant to that situation, the col-
lective representations that the individual brings to that situation, and individual
characteristics.

The appraisal process can be automatic, nonverbal, instantaneous, and occur
outside of consciousness (Smith 1991). Although originally theorized to result
from cognitive processing, appraisals also can result from affective (i.e., feeling)
processing instigated by well-learned affective cues (e.g., a Ku Klux Klan emblem;
Blascovich & Mendes 2000). Further, affective processing can occur independently
of cognitive processing and, like cognitive processing, may occur below awareness
(e.g., LeDoux 1996, Zajonc 2000). Stimuli presented below levels of awareness
can elicit emotional reactions strong enough to drive judgment and behavior in the
absence of any conscious feelings accompanying these reactions (Winkielman &
Berridge 2004).

Although we focus on how stigma may lead to appraisals of identity threat,
stigma may also lead to identity challenge (e.g., O'Brien & Crandall 2003). For
example, a woman could perceive herself as a potential target of sexism, yet not
appraise this as a threat if she feels she has more than sufficient coping resources
to meet the demand (Kaiser et al. 2004a). Such resources might include perceived
control over important resources, the ability to limit exposure to others who are
prejudiced, strong group identity, or dispositional optimism.

Involuntary Responses to Identity Threat

Involuntary responses to identity threat include anxiety (Spencer et al. 1999),
arousal (Ben-Zeev et al. 2004), and increased blood pressure (Blascovich et al.
2001). Identity threat has been linked to indirect measures of anxiety in the absence

of self-reported anxiety (Blascovich et al. 2001, Bosson et al. 2004). For example, gay men who interacted with preschool children under conditions conducive to creating stereotype threat demonstrated increased nonverbal anxiety compared to unthreatened gay men, but the former did not report feeling more anxious on self-report measures. Nonverbal anxiety, but not self-reported anxiety, mediated the effects of threat condition on participants' child-care performance (Bosson et al. 2004). These latter findings strongly suggest that affective responses to identity threat may not be conscious and amenable to self-report measures. Like other types of stress, identity threat can also consume valuable cognitive resources (Klein & Boals 2001). Schmader & Johns (2003) found that manipulations of stereotype threat (e.g., describing a test as measuring quantitative or intellectual capacity) led to lower working memory capacity among individuals targeted by the stereotype (women and Latinos) while having no effect on individuals not targeted by the stereotype (men and whites). Furthermore, reductions in working memory capacity mediated the effects of the stereotype threat manipulation on performance.

Identity threat may also engender automatic vigilance to threat-related stimuli. Automatic stimulus evaluation directs attention toward events that may have undesirable consequences for the perceiver (Pratto & John 1991). Previous experience with prejudice and discrimination can set the stage for members of stigmatized groups to use a "zero miss" signal detection strategy wherein injustice cues in the environment trigger vigilance for discrimination (Feldman-Barrett & Swim 1998). Women led to anticipate interacting with a sexist (versus a nonsexist) man allocated more attention to subliminally presented words that threatened their social identity, as did women who scored high (versus low) in stigma consciousness (CR Kaiser, SB Vick, & B Major, submitted). Automatic vigilance, however, is not an inevitable by-product of stigmatization. Some members of stigmatized groups screen out identity threat–relevant information at a nonconscious attentional level (CR Kaiser, SB Vick, & B Major, submitted; Miller & Kaiser 2001; Stangor et al. 2003a).

Ironically, people who chronically expect and are vigilant for signs of discrimination may create the rejection they fear by communicating these expectancies to others. For example, when women high in stigma consciousness interacted with a male partner who they had been led to believe was sexist, they rated him especially critically; their ratings elicited negative evaluations from the male partner, in turn confirming the women's belief that they would not like him (Pinel 2002). African American students who were high in sensitivity to race-based rejection prior to entering college had less-diverse friendships and felt less trust in their university at the end of their first year in college. They also reported decreased attendance at academic review sessions, increased anxiety about approaching instructors with academic problems, and decreased GPAs by the time they were college juniors (Mendoza-Denton et al. 2004).

Coping in Response to Threats to the Self

People cope with stigma-induced identity threat in a variety of ways (see, e.g., Allport 1954, Miller & Kaiser 2001, Miller & Major 2000, Swim & Thomas

2004). Some coping efforts are primarily problem focused (e.g., when an overweight person decides to go on a diet), whereas others are primarily emotion focused (e.g., restricting one's comparisons to others who are also overweight), although some strategies may serve both goals (e.g., avoiding wearing a bathing suit). Coping strategies can also be characterized as engagement versus disengagement strategies, with the former reflecting approach or fight motivation, and the latter reflecting avoid or flight motivation (Miller 2004, Miller & Kaiser 2001). We focus here on three coping strategies addressed in recent research: (*a*) attributing negative events to discrimination (versus to the self), (*b*) disengaging self-esteem and effort from identity-threatening domains (versus engaging and striving in these domains), and (*c*) increasing identification with one's stigmatized group (versus distancing oneself from the group).

BLAMING DISCRIMINATION VERSUS BLAMING THE SELF   When members of stigmatized groups encounter negative outcomes, one way they may cope with the threat to their self-esteem is by blaming the outcome on discrimination rather than on themselves (Crocker & Major 1989, Major et al. 2002b). Blaming specific negative events on discrimination is conceptually and methodologically distinct from self-reports of experiencing pervasive discrimination. The latter confound attributional processes with frequency and severity of exposure to discrimination. Attributions to discrimination buffer self-esteem primarily when an individual has experienced a threat to an internal, stable aspect of the personal self (Major et al. 2002b). In such contexts, blaming the event on discrimination shifts blame from stable, unique aspects of the personal self to a more external cause—the prejudice of others—thereby protecting self-esteem (e.g., Major et al. 2003a). However, making an attribution to discrimination still implicates one's social identity. Thus, making an attribution to discrimination is more harmful to self-esteem than is making a purely external attribution (Schmitt & Branscombe 2002). Attributions to discrimination also protect self-esteem more when prejudice is blatant rather than hidden or disguised. Attributing a rejection to discrimination is positively associated with self-esteem in the presence of blatant prejudice, but is negatively related to self-esteem in the absence of prejudice cues (Major et al. 2003c).

Coping strategies simultaneously affect more than one outcome. Whereas making an attribution to discrimination may sometimes protect personal self-esteem, it may also interfere with accurate knowledge of one's strengths and weaknesses (Aronson & Inzlicht 2004, Cohen et al. 1999). Furthermore, members of stigmatized groups who blame their failures on discrimination are socially derogated (Kaiser & Miller 2001). Thus, it is not surprising that members of stigmatized groups are more likely to blame negative outcomes on discrimination in private or when they are with other members of their ingroup than when they are in public settings with members of higher-status groups (Stangor et al. 2002). Furthermore, under public reporting conditions, stigmatized targets of discrimination are less likely to report discrimination than are similar others who view the same event (Sechrist et al. 2004). Thus, even when attributing negative events to discrimination

may be warranted and beneficial to self-esteem, targets of discrimination may be unwilling to engage in this coping strategy.

DISENGAGEMENT VERSUS STRIVING   Another way in which the stigmatized may cope with identity threat is by withdrawing their efforts and/or disengaging their self-esteem from domains in which they are negatively stereotyped or fear being a target of discrimination (Keller & Dauenheimer 2003, Major & Schmader 1998, Major et al. 1998, Schmader et al. 2001, Steele 1997, Stone 2002). For example, Davies et al. (2002) demonstrated that women taking a difficult test who were exposed to negative gender stereotypes chose to answer fewer math questions and instead focused on answering questions related to verbal ability. Over time, individuals may disidentify with domains in which their group is negatively stereotyped or unfairly treated so that their performance in that domain is no longer important to their self-worth (Crocker & Major 1989, Steele 1997). For example, the more African American college students believed that differences in status between ethnic groups in America were unjust, the less likely they were to say that academic performance was an important part of their self-concepts (Schmader et al. 2001). Members of lower-status groups also are more likely to devalue domains if they are led to believe that status differences between their group and higher-status groups are unfair (Schmader et al. 2001). Although devaluing and withdrawing effort from domains in which one is negatively stereotyped and treated unjustly may protect self-esteem, it may come at the cost of success in those domains.

An alternative way of coping with identity threat in socially valued domains is to compensate, or strive even harder to overcome obstacles (Allport 1954, Miller & Myers 1998). In a direct demonstration of enhanced striving, overweight women who believed their stigma might have a negative impact on an interaction (i.e., who thought that their partner could see them) compensated by bolstering their social skills compared to overweight women who thought they could not be seen by their partners (Miller et al. 1995). A dispositional preference to work harder to overcome obstacles, however, may be related to poor health, as in the positive relationship observed between "John Henryism" and hypertension among African Americans (James et al. 1983).

GROUP IDENTIFICATION VERSUS DISIDENTIFICATION   Members of stigmatized groups may cope with identity threat by approaching, or identifying more closely with, their group (Allport 1954). Groups can provide emotional, informational, and instrumental support, social validation for one's perceptions, social consensus for one's attributions, and a sense of belonging. Group identification is positively correlated with self-esteem among stigmatized groups (e.g., Bat-Chava 1994, Rowley et al. 1998). Branscombe et al. (1999) proposed that group identification increases in response to perceived prejudice against the group and that this increase in group identification partially offsets the negative effects of perceiving pervasive prejudice on personal self-esteem. These predictions have been supported in correlational research with African Americans (Branscombe et al. 1999), older adults (Garstka

et al. 2004), international students at an American university (Schmitt et al. 2003), and women (Schmitt et al. 2002). Further, customers in a piercing salon who read that prejudice existed against body piercers subsequently identified more strongly with that group than did customers who read that prejudice against body piercers was decreasing (Jetten et al. 2001). Although this evidence suggests that group identification may be an effective coping strategy in response to perceptions of prejudice against the group, it is important to define precisely what is meant by group identification (Ashmore et al. 2004). For example, the more women perceive pervasive discrimination against women, the more central they regard their gender to be in their self-concept, but the less proud they are to be a woman (Eccleston & Major 2004).

Whereas highly identified group members may respond to threats to the group by increasing their identification with the group, members who are low in identification may cope by decreasing their identification even more (see Ellemers et al. 2002 for a review). After reading about pervasive discrimination toward their ethnic group, for example, Latino/a American students who had previously reported low levels of ethnic group identification identified even less with their ethnic group, whereas previously highly identified Latino/a American students identified even more strongly (McCoy & Major 2003).

OUTCOMES OF STIGMATIZATION

Coping with stigma often involves trade-offs. Strategies used in the service of achieving one goal (protecting self-esteem) may inhibit attainment of other goals (academic achievement). Thus, it is important to look at multiple responses to and effects of stigmatization within the same study. Rarely, however, have stigma researchers done so. In the following section, we briefly focus on how stigma affects three important outcomes: self-esteem, academic achievement, and health.

Self-Esteem

A number of empirical investigations of the relationship between stigma and self-esteem have been conducted over the past 15 years (e.g., Branscombe et al. 1999, Crocker et al. 1991, Quinn & Crocker 1999). Researchers typically measure personal (Twenge & Crocker 2002) and collective self-esteem (e.g., Crocker et al. 1994) with self-report measures. More recently, they have assessed personal and collective self-esteem with the implicit association test (IAT) (e.g., Nosek et al. 2002) and other indirect measures (Jost et al. 2002).

Many classic perspectives on the effects of stigmatization assumed that the stigmatized internalize the negative view of them held by society at large (e.g., Cartwright 1950, Clark & Clark 1947). According to this view, levels of self-esteem in stigmatized groups should parallel the degree to which they are devalued by the culturally dominant group (Twenge & Crocker 2002). Members of nonstigmatized

groups should have higher self-esteem than members of stigmatized groups, and among stigmatized groups, those who are more valued (e.g., Asian Americans) should have higher self-esteem than those who are less valued (e.g., blacks and Latinos in the United States). A meta-analysis of racial differences in self-report measures of personal self-esteem showed no support for this prediction. African Americans had higher self-esteem than did white Americans, who had higher self-esteem than did Latino Americans, who had higher self-esteem than did Asian Americans and Native Americans (Twenge & Crocker 2002). In contrast, the self-reported collective self-esteem of African, Latino, and Asian Americans is greater than or equal to the collective self-esteem of white Americans (Crocker et al. 1994).

Research assessing self-esteem with indirect or implicit measures (e.g., racial preferences), however, tells a different story. One study suggests that blacks have the highest implicit personal self-esteem, followed by Latinos, whites, and Asians, although the differences between the groups were slight (Nosek et al. 2002). Several studies using indirect measures of collective self-esteem, however, show that whites demonstrate ingroup favoritism, whereas Latino, Asian, and African Americans demonstrate significant outgroup favoritism (favor whites) (Ashburn-Nardo et al. 2003, Jost et al. 2002, Nosek et al. 2002). The picture is no less complicated with regard to nonracial stigmas.

For example, overweight women self-report lower personal self-esteem than do average-weight women (Miller & Downey 1999) and show lower collective self-esteem on implicit measures (Rudman et al. 2002). Younger adults and older adults have equivalent levels of personal self-esteem on both implicit and explicit measures; however, both groups favored younger adults on an implicit measure of collective self-esteem (Hummert et al. 2002). Women self-report lower levels of personal self-esteem than do men (Kling et al. 1999, Major et al. 1999), but score equal to men on implicit measures of personal self-esteem (Aidman & Carroll 2002, Greenwald & Farnham 2000, Nosek et al. 2002).

In short, results are inconsistent. Some research supports an internalization perspective, but most does not. Part of the problem can be traced to measurement issues associated with both explicit (Greenwald et al. 2002) and implicit measures (Fazio & Olson 2003, Olson & Fazio 2003). Whereas self-report measures are susceptible to social desirability, implicit measures can sometimes be tainted by environmental or extrapersonal associations—culturally shared, but not necessarily personally endorsed, representations of groups (Karpinski & Hilton 2001, Olson & Fazio 2004). Measures such as the IAT may overestimate the extent of outgroup favoritism by stigmatized groups (Olson & Fazio 2004). However, measurement issues cannot tell the whole story, as the IAT has demonstrated predictive validity. For example, blacks who demonstrated outgroup favoritism on the IAT were also more likely to choose a white person over a black person for an interaction partner (Ashburn-Nardo et al. 2003).

Rather than focusing on self-esteem differences between stigmatized and non-stigmatized groups, identity threat perspectives draw attention to variability in self-esteem within stigmatized groups, and even within the same individual across

contexts. Self-esteem varies as a function of collective representations, situational cues, and personal characteristics (Crocker et al. 1991, 1993; Major et al. 2003b; Quinn & Crocker 1999). For example, experimentally manipulating perceptions of prejudice against their ethnic group led to higher threat appraisals and lower self-esteem (compared to a no-prejudice manipulation) among Latinos who strongly endorsed the ideology of meritocracy, but not among Latinos who rejected this ideology (B Major, CR Kaiser, SK McCoy, submitted). Exposure to pervasive sexism led to higher threat appraisals and lower self-esteem among pessimistic women but not among optimistic women (Kaiser et al. 2004a). In both of these studies, threat appraisals mediated the effect of situation (exposure to prejudice or not) and personal characteristics on explicit self-esteem. Research is needed to understand how collective representations, situational cues, and personal characteristics affect implicit measures of self-esteem among stigmatized groups.

Academic Achievement

Members of stigmatized and nonstigmatized groups differ substantially in measures of academic achievement. Data compiled by the National Center for Education Statistics, for example, indicate that in 2001, black (10.9%) and Latino students (27%) were more likely than were white students (7.3%) in the United States to drop out of high school. Blacks (18%) and Latinos (11%) were also less likely than whites (33%) to earn bachelors degrees. Moreover, compared to whites, black, Latino, and Native American students had lower standardized test scores across all subjects and grade levels tested (National Center for Education Statistics 2004).

Differences in performance among ethnic groups or between women and men often are attributed to various forms of discrimination (see Steele 1997). In countries around the world, children who are members of ethnically stigmatized groups receive a smaller proportion of public education funds than do children who are not members of stigmatized groups (for a review, see Sidanius & Pratto 1999). Parents have lower math expectations for girls than boys (Eccles et al. 1990), and are less likely to pay for their daughters' college education if they are fat than if they are average weight (Crandall 1995).

Although discrimination clearly contributes to achievement differences between stigmatized and nonstigmatized groups, this is not the full story (see Steele et al. 2002 for a review). Situational cues increase the extent to which academic performance situations are appraised as threatening to social identity, and involuntary and voluntary responses to this identity threat may depress academic performance. For example, situational cues signaling that a negative stereotype is relevant as a possible interpretation for one's behavior (e.g., describing a test as diagnostic of ability, or as showing gender differences) impair the test performance of African Americans (Steele & Aronson 1995) and women (Spencer et al. 1999), respectively. Being outnumbered in a stereotyped environment also can harm performance of stigmatized groups (Inzlicht & Ben Zeev 2000). People who would be expected

to appraise stereotype-relevant situations as threats to their social identity, such as people who identify highly with the relevant domain (Aronson et al. 1999) or stereotyped group (Schmader 2002), who are highly conscious of being stereotyped based on their stigma (Brown & Pinel 2002), and who have high testosterone levels (Josephs et al. 2003) are more likely to show performance decrements in stereotype-relevant situations.

Stigma-induced identity threat resulting from activation of negative group stereotypes or fear of being a victim of prejudice can harm performance through involuntary stress responses such as anxiety and decrements in working memory capacity (Blascovich et al. 2001, Bosson et al. 2004, Schmader & Johns 2003). Emotion-focused coping efforts such as self-handicapping and withdrawing effort from negatively stereotyped domains can also impair performance (Davies et al. 2002, Keller 2002, McKown & Weinstein 2003). Other coping strategies, such as thinking of intelligence as malleable, or attributing one's group's past poor performances to situational factors, in contrast, can reduce the negative impact of social identity threat on performance (Good et al. 2003).

Stigma-induced identity threat also can lead stigmatized groups to chronically disengage their self-esteem from intellectual tasks (Crocker et al. 1998; Steele 1992, 1997). Consistent with this notion, the correlation between self-esteem and academic achievement weakens in African American adolescents over time (Osborne 1995). Furthermore, whereas the self-esteem of European American students is affected by performance feedback on tests of intellectual ability, African American students' self-esteem is not, suggesting that the latter may psychologically disengage their self-esteem from test feedback (Major et al. 1998). African Americans are particularly likely to disengage their self-esteem from performance feedback when their race is made salient (Major et al. 1998). Over time, disidentification from a domain may undermine African American students' school achievement (Steele 1992, 1997). Cognitive strategies such as shaping people's theories about intelligence may be a partial remedy to the problem of disidentification in stigmatized groups (Aronson et al. 2002).

Health

Compared to the nonstigmatized, members of stigmatized groups are at a greater risk for mental and physical health problems, such as depression, hypertension, coronary heart disease, and stroke (American Heart Association 2003, Jackson et al. 1996, Krieger 1990, McEwen 2000). African Americans, for example, have shorter life expectancies, higher infant mortality, and more heart disease than do European Americans (Allison 1998, Flack et al. 1995). Discrimination directly affects the health of the stigmatized by exposing them to physical and social environments that are more toxic and by limiting their access to quality medical care and nutrition (Clark et al. 1999, Harrell 2000, Link & Phelan 2001).

Stigma can also affect health indirectly via identity threat mechanisms. Threats to identity can initiate a cascade of negative cognitions and emotions as well as

physiological threat responses, including elevated cortisol, increased blood pressure, and other cardiovascular responses (Blascovich et al. 2000, Chen & Matthews 2003, Dickerson & Kemeny 2004). Although these physiological responses can be adaptive in the short run, they have adverse health implications if repeatedly experienced over time (McEwen 2000).

Subjective perceptions of stigmatization may be as important as objective exposure to discrimination in predicting adverse health-relevant outcomes among the stigmatized (Allison 1998, Finch et al. 2000, Harrell 2000). Subjective social status is positively related to health-related outcomes, even controlling for objective indicators of social status (Adler et al. 2000, Ostrove et al. 2000). Self-reported experiences of discrimination are positively correlated with psychological distress, and with self-reported physical health problems, such as hypertension, number of sick days, and chronic pain (e.g., Contrada et al. 2001, Diaz et al. 2001, Finch et al. 2000, Klonoff et al. 2000, Krieger 1990, Lewis et al. 2003, Swim et al. 2001, Taylor & Turner 2002, Williams et al. 1997). Self-reported experiences of discrimination also correlate positively with resting blood pressure levels among ethnic minority men (Krieger & Sidney 1996).

Although these findings are consistent with the hypothesis that subjective experiences of discrimination harm mental and physical health, they are limited in several ways. First, most studies do not distinguish between objective exposure to negative events (e.g., being denied a loan) and subjective perceptions of discrimination (because one is black). Studies that attempted to disentangle these effects have produced mixed results (Kessler et al. 1999, Magley et al. 1999, Taylor & Turner 2002, Williams 1997). Second, because these studies are correlational, it is possible that negative emotion predicts perceptions of discrimination rather than the reverse (e.g., Sechrist et al. 2003). Third, none controlled for dispositional variables that might affect correlations between self-reported experiences with discrimination and self-reported psychological distress or health problems, such as individual differences in attributional style or rejection sensitivity. Thus, further research is needed to assess the effects of perceived discrimination on mental and physical health.

Results of the few experiments that have assessed biological stress responses to acute discrimination-related stressors under controlled laboratory conditions are mixed. Some suggest that African Americans exposed to a discrimination stressor in the laboratory have significantly higher cardiovascular reactivity than do those exposed to a nondiscrimination stressor (e.g., Armstead et al. 1989, McNeilly et al. 1995), whereas others suggest that encounters with discrimination-related stressors do not produce greater blood pressure reactivity than do encounters with nondiscrimination stressors (e.g., Fang & Myers 2001). Collective representations and personal characteristics may interact with the immediate situation to affect threat appraisals and cardiovascular responses. African American women who reported being a target of interpersonal mistreatment in the past because of discrimination had higher baseline heart rate levels, and showed greater cardiac reactivity while giving a speech about a potentially discriminatory incident (but not while

engaging in a nonsocial stress task) compared to African American women who either reported not being a target of mistreatment or who reported being a target of mistreatment but did not attribute it to discrimination (Guyll et al. 2001).

Psychological factors that increase susceptibility to stigma-related identity threat may negatively affect health-related outcomes. Individuals who are chronically vigilant for stigma-related identity threats may appraise potentially stigma-relevant situations as threatening, leading to heightened physiological threat responses. HIV-positive gay men who were high in sensitivity to rejection based on their homosexuality showed more rapid advancement of HIV infection over a nine-year period than did those less sensitive to rejection based on their homosexuality (Cole et al. 1997). Furthermore, HIV progressed most rapidly among high rejection-sensitive men who were "out" (versus concealed), and thus who were more exposed to the risk of social rejection.

Psychological factors associated with perceived resources, in contrast, may have beneficial effects on health by decreasing identity threat. As noted above, optimistic women are less threatened by and have less negative emotional reactions to prejudice than do pessimistic women (Kaiser et al. 2004a). Optimism (as opposed to pessimism) is positively related to mental and physical health in response to a variety of severe stressors (Chen & Matthews 2003, Scheier et al. 2001). The coping strategies used to deal with identity threat may also have implications for health.

CONCLUSIONS

This chapter sought to integrate theory and research on the phenomenology and effects of social stigma—of being labeled, negatively stereotyped, excluded, discriminated against, and low in social status and power. Traditionally, members of stigmatized groups have been portrayed as passive victims of others' negative stereotypes, prejudicial attitudes, and discriminatory behaviors. Research reviewed here demonstrates that stigma does have direct and insidious negative effects on the stigmatized via mechanisms of discrimination, expectancy confirmation, and automatic stereotype activation. Theory and research that takes the perspective of the stigmatized, however, illustrates that individual construals also play a key mediating role in responses to stigma.

We organized recent theory and research within an identity threat model of stigma. This model posits that responses to stigma-relevant situations and circumstances are a function of cues in the immediate situation, collective representations of one's stigma status, and individual characteristics. These combine to affect appraisals of the significance of the situation for well-being. Identity threat results when an individual appraises the demands imposed by a stigma-relevant stressor as potentially harmful to his or her social identity, and as exceeding his or her resources to cope with those demands. Identity threat leads to involuntary stress responses such as anxiety, vigilance to threat, and decreased working memory

capacity, and motivates attempts at threat reduction through coping strategies such as blaming negative events on discrimination, identifying more closely with the threatened group, and disengaging self-esteem from threatening domains. These involuntary stress responses and voluntary coping efforts have implications for important outcomes such as self-esteem, academic achievement, and health.

The identity threat perspective integrates research on the link between perceived discrimination and self-esteem with research on the link between stereotype threat and test performance. It also identifies holes in the literature and suggests several avenues for future research. First, little is known about the conditions that elicit vigilance for stigma-relevant threats in the environment as opposed to active suppression of such knowledge. Second, the significance and meaning of outgroup favoritism among stigmatized groups on implicit measures is unclear. Does this indicate lower implicit collective self-esteem among stigmatized groups or knowledge of cultural valuation of different groups? Third, researchers need to identify the conditions that lead the stigmatized to appraise stigma-relevant stressors as identity challenges rather than as identity threats and that lead to increased striving rather than withdrawal. Fourth, the mechanisms through which stigma-induced identity threat affects health need to be identified. Finally, evidence of trade-offs among different coping mechanisms points to a need for researchers to include multiple dependent variables (e.g., academic performance, self-esteem) in the same study.

We close by noting that one of the major insights of a social psychological perspective on stigma is the tremendous variability across people, groups, and situations in responses to stigma. The emerging understanding of factors that make people resilient, as well as vulnerable, to stigma and identification of effective coping strategies for dealing with identity-threatening situations holds some promise for improving the predicament of the stigmatized.

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LITERATURE CITED

Adler NE, Epel ES, Castellazzo G, Ickovics JR. 2000. Relationship of subjective and objective social status with psychological and physiological functioning: preliminary data in healthy, white women. *Health Psychol.* 19:586–92

Aidman EV, Carroll SM. 2002. Implicit individual differences: relationships between implicit self-esteem, gender identity, and gender attitudes. *Eur. J. Personal.* 17:19–36

Allison KW. 1998. Stress and oppressed category membership. In *Prejudice: The Tar-get's Perspective*, ed. JK Swim, C Stangor, pp. 145–70. San Diego, CA: Academic

Allport GW. 1954. *The Nature of Prejudice*. Boston, MA: Addison-Wesley

American Heart Association. 2003. *Stroke risk factors*. Accessed Dec. 11, 2003. http://www.americanheart.org/presenter.jhtml?identifier=237

Armstead CA, Lawler KA, Gorden G, Cross L, Gibbons M. 1989. Relationship of racial stressors to blood pressure responses and anger expression in black college students. Special issue: race, reactivity, and blood

pressure regulation. *Health Psychol.* 8:541–56

Aronson J, Fried CB, Good C. 2002. Reducing the effects of stereotype threat on African American college students by shaping theories of intelligence. *J. Exp. Soc. Psychol.* 38:113–25

Aronson J, Inzlicht M. 2004. The ups and downs of attributional ambiguity: stereotype vulnerability and self-knowledge. *Psychol. Sci.* In press

Aronson J, Lustina MJ, Good C, Keough K, Steele CM, Brown J. 1999. When white men can't do math: necessary and sufficient factors in stereotype threat. *J. Exp. Soc. Psychol.* 35:29–46

Ashburn-Nardo L, Knowles ML, Monteith MJ. 2003. Black Americans' implicit racial associations and their implications for intergroup judgment. *Soc. Cogn.* 21:61–87

Ashmore RD, Deaux K, McLaughlin-Volpe T. 2004. An organizing framework for collective identity: articulation and significance of multidimensionality. *Psychol. Bull.* 130:80–114

Bargh JA, Chen M, Burrows L. 1996. Automaticity of social behavior: direct effects of trait construct and stereotype activation on action. *J. Personal. Soc. Psychol.* 71:230–44

Bat-Chava Y. 1994. Group identification and self-esteem of deaf adults. *Personal. Soc. Psychol. Bull.* 20:494–502

Ben-Zeev T, Fein S, Inzlicht M. 2004. Does arousal mediate stereotype threat? *J. Exp. Soc. Psychol.* In press

Blascovich J, Mendes WB. 2000. Challenge and threat appraisals: the role of affective cues. In *Feeling and Thinking: The Role of Affect in Social Cognition. Studies in Emotion and Social Interaction*, ed. JP Forgas, pp. 59–82. New York: Cambridge Univ. Press. 2nd ser.

Blascovich J, Mendes WB, Seery MD. 2000. Intergroup encounters and threat: a multimethod approach. In *From Prejudice to Intergroup Emotions: Differentiated Reactions to Social Groups*, ed. DM Mackie, ER Smith, pp. 89–109. New York: Psychol. Press

Blascovich J, Spencer SJ, Quinn D, Steele C. 2001. African Americans and high blood pressure: the role of stereotype threat. *Psychol. Sci.* 12:225–29

Blascovich J, Tomaka J. 1996. The biopsychosocial model of arousal regulation. In *Advances in Experimental Social Psychology*, ed. MP Zanna, vol. 28, pp. 1–51. San Diego, CA: Academic

Bosson JK, Haymovitz EL, Pinel EC. 2004. When saying and doing diverge: the effects of stereotype threat on self-reported versus nonverbal anxiety. *J. Exp. Soc. Psychol.* 40:247–55

Braddock JH, McPartland JM. 1987. How minorities continue to be excluded from equal employment opportunities: research on labor market and institutional barriers. *J. Soc. Issues* 43:5–39

Branscombe NR. 1998. Thinking about one's gender group's privileges or disadvantages: consequences for well-being in women and men. *Br. J. Soc. Psychol.* 37:167–84

Branscombe NR, Schmitt MT, Harvey RD. 1999. Perceiving pervasive discrimination among African Americans: implications for group identification and well-being. *J. Personal. Soc. Psychol.* 77:135–49

Broman CL. 1996. Coping with personal problems. In *Mental Health in Black America*, ed. HW Neighbors, JS Jackson, pp. 117–29. Thousand Oaks, CA: Sage

Brown RP, Pinel EC. 2002. Stigma on my mind: individual differences in the experience of stereotype threat. *J. Exp. Soc. Psychol.* 39:626–33

Cartwright D. 1950. Emotional dimensions of group life. In *Feelings and Emotions*, ed. ML Raymert, pp. 439–47. New York: McGraw-Hill

Chen E, Matthews KA. 2003. Development of the cognitive appraisal and understanding of social events (CAUSE) videos. *Health Psychol.* 22:106–10

Clark K, Clark M. 1947. Racial identification and preference in Negro children. In *Readings in Social Psychology*, ed. TM Newcomb, EL Hartley, pp. 169–78. New York: Holt

Clark R, Anderson NB, Clark VR, Williams DR. 1999. Racism as a stressor for African Americans: a biopsychosocial model. *Am. Psychol.* 54:805–16

Cohen G, Steele CM, Ross LD. 1999. The mentor's dilemma: providing critical feedback across the racial divide. *Personal. Soc. Psychol. Bull.* 25:1302–18

Cole SW, Kemeny ME, Taylor SE. 1997. Social identity and physical health: accelerated HIV progression in rejection-sensitive gay men. *J. Personal. Soc. Psychol.* 72:320–35

Compas BE, Connor JK, Saltzman H, Thomsen A, Wadsworth M. 1999. Getting specific about coping: effortful and involuntary responses to stress in development. In *Soothing and Stress*, ed. M Lewis, D Ramsay, pp. 229–56. Mahwah, NJ: Erlbaum

Contrada RJ, Ashmore RD, Gary ML, Coups E, Egeth JD, et al. 2001. Measures of ethnicity-related stress: psychometric properties, ethnic group differences, and associations with well-being. *J. Appl. Soc. Psychol.* 31:1775–820

Crandall CS. 1994. Prejudice against fat people: ideology and self-interest. *J. Personal. Soc. Psychol.* 66:882–94

Crandall CS. 1995. Do parents discriminate against their heavyweight daughters? *Personal. Soc. Psychol. Bull.* 21:724–35

Crandall CS, Eshleman A. 2003. A justification-suppression model of the expression and experience of prejudice. *Psychol. Bull.* 129:414–46

Crocker J. 1999. Social stigma and self-esteem: situational construction of self worth. *J. Exp. Soc. Psychol.* 35:89–107

Crocker J, Luhtanen R, Blaine B, Broadnax S. 1994. Collective self-esteem and psychological well-being among white, black, and Asian college students. *Personal. Soc. Psychol. Bull.* 20:503–13

Crocker J, Cornwell B, Major B. 1993. The stigma of overweight: the affective consequences of attributional ambiguity. *J. Personal. Soc. Psychol.* 64:60–70

Crocker J, Major B. 1989. Social stigma and self-esteem: the self-protective properties of stigma. *Psychol. Rev.* 96:608–30

Crocker J, Major B, Steele C. 1998. Social stigma. In *Handbook of Social Psychology*, ed. S Fiske, D Gilbert, G Lindzey, vol. 2, pp. 504–53. Boston, MA: McGraw-Hill

Crocker J, Voelkl K, Testa M, Major B. 1991. Social stigma: the affective consequences of attributional ambiguity. *J. Personal. Soc. Psychol.* 60:218–28

Crosby F. 1982. *Relative Deprivation and Working Women*. New York: Oxford Univ. Press

Crosby F, Pufall A, Snyder RC, O'Connell M, Whalen P. 1989. The denial of personal disadvantage among you, me, and all the other ostriches. In *Gender's Thought: Psychological Perspectives*, ed. M Crawford, M Gentry, pp. 79–99. New York: Springer-Verlag

Darley JM, Fazio RH. 1980. Expectancy confirmation processes arising in the social interaction sequence. *Am. Psychol.* 35:867–81

Davies PG, Spencer SJ, Quinn DM, Gerhardstein R. 2002. Consuming images: how television commercials that elicit stereotype threat can restrain women academically and professionally. *Personal. Soc. Psychol. Bull.* 28:1615–28

Deaux K, Major B. 1987. Putting gender into context: an interactive model of gender-related behavior. *Psychol. Rev.* 94:369–89

Diaz RM, Ayala G, Bein E, Henne J, Marin BV. 2001. The impact of homophobia, poverty, and racism on the mental health of gay and bisexual Latino men. *Am. J. Public Health* 91:927–32

Dickerson S, Kemeny ME. 2004. Acute stressors and cortisol responses: a theoretical integration and synthesis of laboratory research. *Psychol. Bull.* 130:355–91

Dijksterhuis A, Aarts H, Bargh JA, van Knippenberg A. 2000. On the relationship between associative strength and automatic behavior. *J. Exp. Soc. Psychol.* 36:531–44

Eccles J, Jacobs JE, Harold RD. 1990. Gender role stereotypes, expectancy effects, and parents' socialization of gender differences. *J. Soc. Issues* 46:183–201

Ellemers N, Spears R, Doosje B. 2002. Self and social identity. *Annu. Rev. Psychol.* 53:161–86

Fang CY, Myers HF. 2001. The effects of racial stressors and hostility on cardiovascular reactivity in African American and Caucasian men. *Health Psychol.* 20:64–70

Fazio RH, Effrein EA, Falender V. 1981. Self-perceptions following social interaction. *J. Personal. Soc. Psychol.* 41:232–42

Fazio RH, Olson MA. 2003. Implicit measures in social cognition research: their meaning and uses. *Annu. Rev. Psychol.* 54:297–327

Feldman-Barrett L, Swim JK. 1998. Appraisals of prejudice and discrimination. In *Prejudice: The Target's Perspective*, ed. JK Swim, C Stangor, pp. 11–36. San Diego, CA: Academic

Finch BK, Kolody B, Vega WA. 2000. Perceived discrimination and depression among Mexican-origin adults in California. *J. Health Soc. Behav.* 41:295–313

Fiske S. 1993. Controlling other people: the impact of power on stereotyping. *Am. Psychol.* 48:621–28

Flack JM, Amoro H, Jenkins W, Kunitz S, Levy J, et al. 1995. Panel I: epidemiology of minority health. *Health Psychol.* 14:592–600

Garstka TA, Schmitt MT, Branscombe NR, Hummert ML. 2004. How young and older adults differ in their responses to perceived age discrimination. *Psychol. Aging* 19:326–35

Goffman E. 1963. *Stigma: Notes on the Management of Spoiled Identity*. New York: Prentice Hall

Good C, Aronson J, Inzlicht M. 2003. Improving adolescents' standardized test performance: an intervention to reduce the effects of stereotype threat. *J. Appl. Dev. Psychol.* 24:645–62

Greenwald AG, Banaji MR, Rudman LA, Farnham SD, Nosek BA, Mellott DS. 2002. A unified theory of implicit attitudes, stereotypes, self-esteem, and self-concept. *Psychol. Rev.* 109:3–25

Greenwald AG, Farnham SD. 2000. Using the Implicit Association Test to measure self-esteem and self-concept. *J. Personal. Soc. Psychol.* 79:1022–38

Guyll M, Matthews KA, Bromberger JT. 2001. Discrimination and unfair treatment: relationship to cardiovascular reactivity among African American and European American women. *Health Psychol.* 20:315–25

Harrell SP. 2000. A multidimensional conceptualization of racism-related stress: implications for the well-being of people of color. *Am. J. Orthopsychiatry* 70:42–57

Harris MJ, Milich R, Corbitt EM, Hoover DW, Brady M. 1992. Self-fulfilling effects of stigmatizing information on children's social interactions. *J. Personal. Soc. Psychol.* 63:41–50

Heatherton TF, Kleck RE, Hebl MR, Hull JG, eds. 2000. *The Social Psychology of Stigma*. New York: Guilford

Hebl MR, Tickle J, Heatherton TF. 2000. Awkward moments in interactions between nonstigmatized and stigmatized individuals. See Heatherton et al. 2000, pp. 275–306

Horowitz RE. 1939. Racial aspects of self-identification in nursery school children. *J. Psychol.* 7:91–99

Hummert ML, Garstka TA, O'Brien LT, Greenwald AG, Mellot DS. 2002. Using the implicit association test to measure age differences in implicit social cognitions. *Psychol. Aging* 17:482–95

Inzlicht M, Ben-Zeev T. 2000. A threatening intellectual environment: why females are susceptible to experiencing problem-solving deficits in the presence of males. *Psychol. Sci.* 11:365–71

Inzlicht M, Ben-Zeev T. 2003. Do high-achieving female students underperform in private? The implication of threatening environments on intellectual processing. *J. Educ. Psychol.* 95:796–805

Inzlicht M, Good C. 2004. Are you threatening me? How environments can threaten intellectual performance, sense of belonging, and self-concept. See Levin & van Laar 2004. In press

Jackson JS, Brown TN, Williams DR, Torres M, Sellers SL, Brown K. 1996. Racism

and the physical and mental health status of African Americans: a thirteen-year national panel study. *Ethn. Dis.* 6:132–47

James SA, Hartnett SA, Kalsbeek WD. 1983. John Henryism and blood pressure differences among black men. *J. Behav. Med.* 6:259–78

James SA, LaCroix AZ, Kleinbaum DG, Strogatz DS. 1984. John Henryism and blood pressure differences among black men: II. The role of occupational stressors. *J. Behav. Med.* 6:257–73

Jetten J, Branscombe NR, Schmitt MT, Spears R. 2001. Rebels with a cause: group identification as a response to perceived discrimination from the mainstream. *Personal. Soc. Psychol. Bull.* 27:1204–13

Jones EE, Farina A, Hastorf AH, Markus H, Miller DT, Scott RA. 1984. *Social Stigma: The Psychology of Marked Relationships*. New York: Freeman

Josephs RA, Newman ML, Brown RP, Beer JM. 2003. Status, testosterone, and human intellectual performance: stereotype threat as status concern. *Psychol. Sci.* 14:158–63

Jost JT, Banaji MR. 1994. The role of stereotyping in system-justification and the production of false consciousness. *Br. J. Soc. Psychol.* 33:1–27

Jost JT, Major B. 2001. *The Psychology of Legitimacy: Emerging Perspective on Ideology, Justice, and Intergroup Relations*. New York: Cambridge Univ. Press

Jost JT, Pelham BW, Carvallo MR. 2002. Nonconscious forms of system justification: implicit and behavioral preferences for higher status groups. *J. Exp. Soc. Psychol.* 38:586–602

Jost JT, Pelham BW, Sheldon O, Sullivan BN. 2003. Social inequality and the reduction of ideological dissonance on behalf of the system: evidence of enhanced system justification among the disadvantaged. *Eur. J. Soc. Psychol.* 33:13–36

Jussim L, Eccles J, Madon S. 1996. Social perception, social stereotypes, and teacher expectations: accuracy and the quest for the powerful self-fulfilling prophecy. In *Advances in Experimental Social Psychology*, ed. MP Zanna, vol. 28, pp. 281–388. San Diego, CA: Academic

Jussim L, Palumbo P, Chatman C, Madon S, Smith A. 2000. Stigma and self-fulfilling prophecies. See Heatherton et al. 2000, pp. 374–418

Kaiser CR, Major B, McCoy SK. 2004a. Expectations about the future and the emotional consequences of perceiving prejudice. *Personal. Soc. Psychol. Bull.* 30:173–84

Kaiser CR, Vick SB, Major B. 2004b. *Prejudice expectations moderate preconscious attention to social identity threatening cues.* Submitted

Kaiser CR, Miller CT. 2001. Stop complaining! The social costs of making attributions to discrimination. *Personal. Soc. Psychol. Bull.* 27:254–63

Karpinski A, Hilton JL. 2001. Attitudes and the implicit association test. *J. Personal. Soc. Psychol.* 81:774–88

Keller J. 2002. Blatant stereotype threat and women's math performance: self-handicapping as a strategic means to cope with obtrusive negative performance expectations. *Sex Roles* 47:193–98

Keller J, Dauenheimer D. 2003. Stereotype threat in the classroom: Dejection mediates the disrupting threat effect on women's math performance. *Personal. Soc. Psychol. Bull.* 29:371–81

Kessler RC, Mickelson KD, Williams DR. 1999. The prevalence, distribution, and mental health correlates of perceived discrimination in the United States. *J. Health Soc. Behav.* 40:208–30

Klein K, Boals A. 2001. The relationship of life event stress and working memory capacity. *Appl. Cogn. Psychol.* 15:565–79

Kling KC, Hyde JS, Showers CJ, Buswell BN. 1999. Gender differences in self-esteem: a meta-analysis. *Psychol. Bull.* 125:470–500

Klonoff EA, Landrine H, Cambell R. 2000. Sexist discrimination may account for well-known gender differences in psychiatric symptoms. *Psychol. Women Q.* 24:93–99

Krieger N. 1990. Racial and gender discrimination: risk factors for high blood pressure? *Soc. Sci. Med.* 30:1273–81

Krieger N. 2000. Discrimination and health. In *Social Epidemiology*, ed. LF Berkman, I Kawachi, pp. 36–75. London: Oxford Univ. Press

Krieger N, Sidney S. 1996. Racial discrimination and blood pressure: the CARDIA study of young black and white adults. *Am. J. Public Health* 86:1370–78

Kurzban R, Leary MR. 2001. Evolutionary origins of stigmatization: the functions of social exclusion. *Psychol. Bull.* 127:187–208

Lazarus RS, Folkman S. 1984. *Stress, Appraisal, and Coping*. New York: Springer-Verlag

Leary MR, Schreindorfer LS. 1998. The stigmatization of HIV and AIDS: rubbing salt in the wound. In *HIV and Social Interaction*, ed. V Derlega, AP Barbee, pp. 12–29. Thousand Oaks, CA: Sage

LeDoux JE. 1996. *The Emotional Brain: The Mysterious Underpinnings of Emotional Life*. New York: Simon & Schuster

Levin S, van Laar C, eds. 2004. *Stigma and Group Inequality: Social Psychological Perspectives*. Mahwah, NJ: Erlbaum. In press

Levy B. 1996. Improving memory in old age through implicit self-stereotyping. *J. Personal. Soc. Psychol.* 71:1092–107

Lewis RJ, Derlega VJ, Griffin JL, Krowinski AC. 2003. Stressors for gay men and lesbians: life stress, gay-related stress, stigma consciousness, and depressive symptoms. *J. Soc. Clin. Psychol.* 22:716–29

Link BG, Phelan JC. 2001. Conceptualizing stigma. *Annu. Rev. Sociol.* 27:363–85

Link BG, Struening EL, Neese-Todd S, Asmussen S, Phelan J. 2001. Stigma as a barrier to recovery: the consequences of stigma for the self-esteem of people with mental illnesses. *Psychiatr. Serv.* 52:1621–26

Magley VJ, Hulin CL, Fitzgerald LF, DeNardo M. 1999. Outcomes of self-labeling sexual harassment. *J. Appl. Psychol.* 84:390–402

Major B. 1994. From social inequality to personal entitlement: the role of social comparisons, legitimacy appraisals, and group membership. In *Advances in Experimental Social Psychology*, ed. MP Zanna, vol. 26, pp. 293–355. San Diego, CA: Academic

Major B, Barr L, Zubek J, Babey SH. 1999. Gender and self-esteem: a meta-analysis. In *Sexism and Stereotypes in Modern Society: The Gender Science of Janet Taylor Spence*, ed. WB Swann, JH Langlois, LA Gilbert, pp. 223–53. Washington, DC: Am. Psychol. Assoc.

Major B, Eccleston CP. 2004. Stigma and social exclusion. In *Social Psychology of Inclusion and Exclusion*, ed. D Abrams, J Marques, MA Hogg, pp. 63–87. New York: Psychol. Press

Major B, Gramzow R, McCoy SK, Levin S, Schmader T, Sidanius J. 2002a. Perceiving personal discrimination: the role of group status and status legitimizing ideology. *J. Personal. Soc. Psychol.* 80:782–96

Major B, Kaiser CR, McCoy SK. 2003a. It's not my fault: when and why attributions to prejudice protect self-esteem. *Personal. Soc. Psychol. Bull.* 29:772–81

Major B, Kaiser CR, McCoy SK. 2004. *Legitimizing ideologies and the impact of prejudice on self-esteem.* Submitted

Major B, McCoy SK, Kaiser CR, Quinton WJ. 2003b. Prejudice and self-esteem: a transactional model. In *European Review of Social Psychology*, ed. W Stroebe, M Hewstone, vol. 14, pp. 77–104. London: Psychol. Press

Major B, Quinton WJ, McCoy SK. 2002b. Antecedents and consequences of attributions to discrimination: theoretical and empirical advances. In *Advances in Experimental Social Psychology*, ed. MP Zanna, pp. 251–330. San Diego, CA: Academic

Major BN, Quinton WJ, Schmader T. 2003c. Attributions to discrimination and self-esteem: impact of group identification and situational ambiguity. *J. Exp. Soc. Psychol.* 39:220–31

Major B, Schmader T. 1998. Coping with stigma through psychological disengagement. In *Prejudice: The Target's Perspective*,

ed. JK Swim, C Stangor, pp. 219–41. San Diego, CA: Academic

Major B, Spencer S, Schmader T, Wolfe C, Crocker J. 1998. Coping with negative stereotypes about intellectual performance: the role of psychological disengagement. *Personal. Soc. Psychol. Bull.* 24:34–50

Major B, Vick SB. 2004. The psychological impact of prejudice. In *Reflecting on the Nature of Prejudice*, ed. JF Dovidio, P Glick, L Rudman. Malden, MA: Blackwell. In press

Marx DM, Roman JS. 2002. Female role models: protecting women's math test performance. *Personal. Soc. Psychol. Bull.* 28:1183–93

McCoy SK, Major B. 2003. Group identification moderates emotional responses to perceived prejudice. *Personal. Soc. Psychol. Bull.* 29:1005–17

McEwen BS. 1998. Stress, adaptation, and disease: allostasis and allostatic load. In *Annals of the New York Academy of Sciences*, ed. SM McCann, JM Lipton, vol. 840, pp. 33–44. New York: NY Acad. Sci.

McEwen BS. 2000. The neurobiology of stress: from serendipity to clinical relevance. *Brain Res.* 886:172–89

McKown C, Weinstein RS. 2002. Modeling the role of child ethnicity and gender in children's differential responses to teacher expectations. *J. Appl. Soc. Psychol.* 32:159–84

McKown C, Weinstein RS. 2003. The development and consequences of stereotype consciousness in middle childhood. *Child Dev.* 74:498–515

McNeilly MD, Robinson EL, Anderson NB, Pieper CF, Shah A, et al. 1995. Effects of racist provocation and social support on cardiovascular reactivity in African American women. *Int. J. Behav. Med.* 2:321–38

Mendoza-Denton R, Page-Gould E, Pietrzak J. 2004. Mechanisms for coping with status-based rejection expectations. See Levin & van Laar 2004. In press

Mendoza-Denton R, Purdie VJ, Downey G, Davis A, Pietrzak J. 2002. Sensitivity to status-based rejection: implications for African American students' college experience. *J. Personal. Soc. Psychol.* 83:896–918

Miller CT. 2004. Social psychological perspectives on coping with stressors related to stigma. See Levin & van Laar 2004. In press

Miller CT, Downey KT. 1999. A meta-analysis of heavyweight and self-esteem. *Personal. Soc. Psychol. Rev.* 3:68–84

Miller CT, Kaiser CR. 2001. A theoretical perspective on coping with stigma. *J. Soc. Issues* 57:73–92

Miller CT, Major B. 1998. Coping with stigma and prejudice. See Heatherton et al. 2000, pp. 243–72

Miller CT, Myers AM. 1998. Compensating for prejudice: how heavyweight people (and others) control outcomes despite prejudice. In *Prejudice: The Target's Perspective*, ed. JK Swim, C Stangor, pp. 191–218. San Diego, CA: Academic

Miller CT, Rothblum ED, Felicio D, Brand P. 1995. Compensating for stigma: obese and nonobese women's reactions to being visible. *Personal. Soc. Psychol. Bull.* 21:1093–106

Miller LS. 1995. *An American Imperative: Accelerating Minority Educational Advancement*. New Haven, CT: Yale Univ. Press

National Center for Education Statistics. 2004. *The Condition of Education.* Washington, DC: Inst. Educ. Sci., U.S. Dep. Educ.

Nelson TD. 2000. *Ageism: Stereotyping and Prejudice Against Older Persons.* Cambridge, MA: MIT Press

Neuberg SL, Smith DM, Asher T. 2000. Why people stigmatize: toward a biocultural framework. See Heatherton et al. 2000, pp. 31–61

Nosek BA, Banaji M, Greenwald AG. 2002. Harvesting implicit group attitudes and beliefs from a demonstration web site. *Group Dyn.* 6:101–15

O'Brien LT, Crandall CS. 2003. Stereotype threat and arousal: effects on women's math performance. *Personal. Soc. Psychol. Bull.* 29:782–89

Olson MA, Fazio RH. 2003. Relationships between implicit measures of prejudice: What are we measuring? *Psychol. Sci.* 14:636–39

Olson MA, Fazio RH. 2004. Reducing the influence of extrapersonal associations on the implicit association test: personalizing the IAT. *J. Personal. Soc. Psychol.* 86:653–67

Operario D, Fiske ST. 2001. Ethnic identity moderates perceptions of prejudice: judgments of personal versus group discrimination and subtle versus blatant bias. *Personal. Soc. Psychol. Bull.* 27:550–61

Osborne JW. 1995. Race and academic disidentification. *J. Educ. Psychol.* 89:728–35

Ostrove MJ, Adler NE, Kuppermann M, Washington AE. 2000. Objective and subjective assessments of socioeconomic status and their relationship to self-rated health in an ethnically diverse sample of pregnant women. *Health Psychol.* 19:613–18

Park JH, Faulkner J, Schaller M. 2003. Evolved disease-avoidance processes and contemporary anti-social behavior: prejudicial attitudes and avoidance of people with physical disabilities. *J. Nonverbal Behav.* 27:65–87

Pinel EC. 1999. Stigma consciousness: the psychological legacy of social stereotypes. *J. Personal. Soc. Psychol.* 76:114–28

Pinel EC. 2002. Stigma consciousness in intergroup contexts: the power of conviction. *J. Exp. Soc. Psychol.* 38:178–85

Pratto P, John O. 1991. Automatic vigilance: the attention-grabbing power of negative social information. *J. Personal. Soc. Psychol.* 61:380–91

Quinn DM, Crocker J. 1999. When ideology hurts: effects of belief in the Protestant ethic and feeling overweight on the psychological well-being of women. *J. Personal. Soc. Psychol.* 77:402–14

Quinn DM, Kahng SK, Crocker J. 2004. Discreditable: stigma effects of revealing a mental illness history on test performance. *Personal. Soc. Psychol. Bull.* 30:803–15

Rowley SJ, Sellers RM, Chavous TM, Smith MA. 1998. The relationship between racial identity and self-esteem in African American college and high school students. *J. Personal. Soc. Psychol.* 74:715–24

Rudman LA, Feinberg J, Fairchild K. 2002. Minority members' implicit attitudes: automatic ingroup bias as a function of group status. *Soc. Cogn.* 20:294–320

Scheier MF, Carver CS, Bridges MW. 2001. Optimism, pessimism, and psychological well-being. In *Optimism and Pessimism: Implications for Theory, Research, and Practice*, ed. EC Chang, pp. 189–216. Washington, DC: Am. Psychol. Assoc.

Schmader T. 2002. Gender identification moderates stereotype threat effects on women's math performance. *J. Exp. Soc. Psychol.* 38:194–201

Schmader T, Johns M. 2003. Converging evidence that stereotype threat reduces working memory capacity. *J. Personal. Soc. Psychol.* 84:440–52

Schmader T, Johns M, Barquissau M. 2004. The costs of accepting gender differences: the role of stereotype endorsement in women's experience in the math domain. *Sex Roles* 50:835–50

Schmader T, Major B, Eccleston CP, McCoy SK. 2001. Devaluing domains in response to threatening intergroup comparisons: perceived legitimacy and the status value asymmetry. *J. Personal. Soc. Psychol.* 80:782–96

Schmitt MT, Branscombe NR. 2002. The meaning and consequences of perceived discrimination in disadvantaged and privileged social groups. In *European Review of Social Psychology*, ed. W Stroebe, M Hewstone, vol. 12, pp. 167–99. London: Psychol. Press

Schmitt MT, Branscombe NR, Kobrynowicz D, Owen S. 2002. Perceiving discrimination against one's gender group has different implications for well-being in women and men. *Personal. Soc. Psychol. Bull.* 28:197–210

Schmitt MT, Spears R, Branscombe NR. 2003. Constructing a minority group identity out of shared rejection: the case of international students. *Eur. J. Soc. Psychol.* 33:1–12

Sechrist GB, Swim JK, Mark, MM. 2003. Mood as information in making attributions to discrimination. *Personal. Soc. Psychol. Bull.* 29:524–531

Sechrist GB, Swim JK, Stangor C. 2004. When do the stigmatized make attributions to discrimination occurring to the self and others?

The roles of self-presentation and need for control. *J. Personal. Soc. Psychol.* 87:111–22

Sekaquaptewa D, Thompson M. 2002. The differential effects of solo status on members of high- and low-status groups. *Personal. Soc. Psychol. Bull.* 28:694–707

Sekaquaptewa D, Thompson M. 2003. Solo status, stereotype threat, and performance expectancies: their effects on women's performance. *J. Exp. Soc. Psychol.* 39:68–74

Sellers RM, Shelton JN. 2003. The role of racial identity in perceived racial discrimination. *J. Personal. Soc. Psychol.* 84:1079–92

Shih M, Ambady N, Richeson JA, Fujita K, Heather G. 2002. Stereotype performance boosts: the impact of self-relevance and the manner of stereotype activation. *J. Personal. Soc. Psychol.* 83:638–47

Sidanius J, Pratto F. 1999. *Social Dominance: An Intergroup Theory of Social Hierarchy and Oppression*. New York: Cambridge Univ. Press

Smith CA. 1991. The self, appraisal, and coping. In *Handbook of Social and Clinical Psychology: The Health Perspective*, ed. CR Snyder, DR Forsyth, pp. 116–37. Elmsford, NY: Pergamon

Snyder M, Tanke ED, Berscheid E. 1977. Social perception and interpersonal behavior: on the self-fulfilling nature of social stereotypes. *J. Personal. Soc. Psychol.* 35:656–66

Spencer S, Steele CM, Quinn DM. 1999. Stereotype threat and women's math performance. *J. Exp. Soc. Psychol.* 35:4–28

Stangor C, Swim JK, Van Allen KL, Sechrist GB. 2002. Reporting discrimination in public and private contexts. *J. Personal. Soc. Psychol.* 82:69–74

Stangor C, Swim JK, Sechrist GB. 2003a. Sensitivity to sexism and perceptions of reports about sexist events. *Swiss J. Psychol.* 48:251–56

Stangor C, Swim JK, Sechrist GB, DeCoster J, Van Allen KL, Ottenbreit A. 2003b. Ask, Answer, and Announce: three stages in perceiving and responding to discrimination. In *European Review of Social Psychology*, ed. W Stroebe, M Hewstone, vol. 14, pp. 277–311. London: Psychol. Press

Steele CM. 1992. Race and the schooling of African Americans. *Atl. Mon.* 269:68–78

Steele CM. 1997. A threat in the air: how stereotypes shape intellectual identity and performance. *Am. Psychol.* 52:613–29

Steele CM, Aronson J. 1995. Stereotype threat and the intellectual test performance of African Americans. *J. Personal. Soc. Psychol.* 69:797–811

Steele CM, Spencer SJ, Aronson J. 2002. Contending with group image: the psychology of stereotype and social identity threat. In *Advances in Experimental Social Psychology*, ed. MP Zanna, vol. 34, pp. 379–440. San Diego, CA: Academic

Stone J. 2002. Battling doubt by avoiding practice: the effects of stereotype threat on self-handicapping in white athletes. *Personal. Soc. Psychol. Bull.* 28:1167–78

Swim JK, Hyers LL, Cohen LL, Ferguson MJ. 2001. Everyday sexism: evidence for its incidence, nature, and psychological impact from three daily diary studies. *J. Soc. Issues* 57:31–53

Swim JK, Thomas MA. 2004. Responses to stigma: a synthesis. See Levin & van Laar 2004. In press

Tajfel H, Turner JC. 1986. The social identity theory of intergroup behavior. In *The Psychology of Intergroup Relations*, ed. S Worchel, WG Austin, pp. 7–24. Chicago: Nelson-Hall

Taylor DM, Wright SC, Porter LE. 1994. Dimensions of perceived discrimination: the personal/group discrimination discrepancy. In *The Psychology of Prejudice: The Ontario Symposium*, ed. MP Zanna, JM Olson, vol. 7, pp. 233–55. Hillsdale, NJ: Erlbaum

Taylor J, Turner RJ. 2002. Perceived discrimination, social stress, and depression in the transition to adulthood: racial contrasts. *Soc. Psychol. Q.* 65:213–25

Twenge J, Crocker J. 2002. Race, ethnicity, and self-esteem: meta-analyses comparing whites, blacks, Hispanics, Asians, and Native Americans, including a commentary on

Gray-Little and Hafdahl (2000). *Psychol. Bull.* 128:371–408

Vorauer J, Kumhyr SM. 2001. Is this about you or me? Self- versus other-directed judgments and feelings in response to intergroup interaction. *Personal. Soc. Psychol. Bull.* 27:706–19

Walton GM, Cohen GL. 2003. Stereotype life. *J. Exp. Soc. Psychol.* 39:456–67

Wheeler SC, Petty RE. 2001. The effects of stereotype activation on behavior: a review of possible mechanisms. *Psychol. Bull.* 127:797–826

Wheeler SC, Petty RE, Jarvis WBG. 2001. Think unto others: the self-destructive impact of negative racial stereotypes. *J. Exp. Soc. Psychol.* 37:173–80

Williams DR. 1997. Race and health: basic questions, emerging directions. *Ann. Epidemiol.* 7:322–33

Williams DR, Yu Y, Jackson J, Anderson N. 1997. Racial differences in physical and mental health: socioeconomic status, stress and discrimination. *J. Health Psychol.* 2:335–51

Winkielman P, Berridge K. 2004. Unconscious emotion. *Curr. Dir. Psychol. Sci.* 13:120–23

Yinger JM. 1994. *Ethnicity: Source of Strength? Source of Conflict?* Albany, NY: State Univ. NY Press

Zajonc RB. 2000. Feeling and thinking: closing the debate over the independence of affect. In *Feeling and Thinking: The Role of Affect in Social Cognition. Studies in Emotion and Social Interaction, Second Series*, pp. 31–58. New York: Cambridge Univ. Press

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