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From Stereotype Threat to Stereotype Threats: Implications of a Multi-Threat Framework for Causes, Moderators, Mediators, Consequences, and Interventions

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More than 100 articles have examined the construct of stereotype threat and its implications. However, stereotype threat seems to mean different things to different researchers and has been employed to describe and explain processes and phenomena that appear to be fundamentally distinct. Complementing existing models, the authors posit a Multi-Threat Framework in which six qualitatively distinct stereotype threats arise from the intersection of two dimensions—the target of the threat (the self/one's group) and the source of the threat (the self/outgroup others/ingroup others). The authors propose that these threats constitute the core of the broader stereotype threat construct and provide the foundation for understanding additional, as of yet uncharacterized, stereotype threats. The proposed threats likely differentially peril those with different stigmatizable characteristics, have different eliciting conditions and moderators, are mediated by somewhat different processes, are coped with and compensated for in different ways, and require different interventions to overcome.

Keywords: *stigma; stereotype threat; stereotyped behaviors; stereotyped attitudes; threat*

The concept of *stereotype threat* (Steele, 1997; Steele, Spencer, & Aronson, 2002) has yielded critical insights into how negative stereotypes may alter the psychology of those targeted by these stereotypes and

thereby hinder these individuals' outcomes in stereotype-relevant domains. A close look at this important literature reveals, however, that stereotype threat often means quite different things to different researchers and often has been employed to describe and explain distinct processes and phenomena. We suggest that the use of stereotype threat as an umbrella concept diminishes its value and interferes with opportunities that could be gained by more fully articulating the related subconcepts that comprise it. In the spirit of further advancing stereotype threat theory, we present a framework that complements earlier theoretical statements (e.g., Steele,

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1997; Steele et al., 2002) by focusing in a somewhat finer manner on the concept of stereotype threat itself. Foundational to our Multi-Threat Framework is the recognition that there is not simply a single stereotype threat but rather six qualitatively distinct core stereotype threats.

Specifically, negative stereotypes about one's group may lead group members to experience one or more of a variety of threats, defined by the intersection of two dimensions—the target of the threat (the self or one's group) and the source of the threat (the self, outgroup others, or ingroup others). In particular, negative stereotypes about one's group may lead one to experience a threat to one's (a) personal self-concept (i.e., "What if this stereotype is true of me?"), (b) group concept ("What if this stereotype is true of my group?"), (c) own reputation in the eyes of outgroup members ("What if outgroup others see me as stereotypic?"), (d) ingroup's reputation in the eyes of outgroup members ("What if outgroup others see my group as stereotypic?"), (e) own reputation in the eyes of ingroup members ("What if ingroup others see me as stereotypic?"), and/or (f) ingroup's reputation in the eyes of ingroup members ("What if ingroup others see our group as stereotypic?"). Absent from the published literature is a thorough conceptual articulation of the implications that follow from differentiating among these threats (see Aronson et al., 1999, for a similar observation regarding a smaller number of alternative threats). We believe these implications are considerable. Below, we propose that these six stereotype threats (a) have different eliciting conditions, (b) differentially peril those with different stigmatizing characteristics, (c) are moderated by different factors, (d) are mediated by somewhat different mechanisms, (e) are coped with and compensated for in different ways, and (f) will require different interventions to overcome.

We begin by reviewing briefly the stereotype threat literature and the ways in which stereotype threat has been defined, operationalized, and explored. We then present our Multi-Threat Framework, discussing the six core threats of focus, the conditions needed to activate each, the factors that moderate and mediate their effects, the kinds of groups most susceptible to the different threats, and the outcomes these threats produce. We review the available evidence touching on our claims and close with a discussion of implications of this approach for intervention and future stereotype threat research.

Current Research and Conceptualizations of Stereotype Threat

In a now-classic series of studies, African American (but not European American) students underperformed on difficult tests similar to the Graduate Record Examination

(GRE) both when the tests were labeled as diagnostic of intellectual ability and when the students were asked beforehand to report their race (Steele & Aronson, 1995). The authors attributed this performance decrement to the evaluation pressures created by the possibility of confirming the negative stereotype that African Americans lack academic ability.

There has since been an explosion of related research, much of which has applied the concept of stereotype threat to other groups and stereotypes. Women have been observed to underperform relative to their potential on quantitative tasks (in comparison to men) when stereotypes about women's math abilities were beforehand made explicit but not when these stereotypes were presented as irrelevant to the task (e.g., Spencer, Steele, & Quinn, 1999). Similar performance deficits emerge for other negatively stereotyped groups, for example, when group membership is made salient, elderly individuals show decreased memory performance (Levy, 1996) and Latinos perform less well on tests labeled as predictive of intelligence (Schmader & Johns, 2003).

Stereotype threat is characterized as a situational threat, meaning that it has the potential to occur in any situation in which negative stereotypes about one's group membership are perceived to apply (Crocker, Major, & Steele, 1998; Steele, 1999; Steele et al., 2002). Thus, minority group membership or relatively low status are not prerequisites for the experience of stereotype threat (e.g., Frantz, Cuddy, Burnett, Ray, & Hart, 2004; Leyens, Désert, Croizet, & Darcis, 2000; Stone, Lynch, Sjomeling, & Darley, 1999); for example, White men may experience stereotype threat and performance decrements in math when the stereotype of Asians' superior quantitative ability is made salient (Aronson et al., 1999).

Research also has explored other consequences, beyond decrements in performance, that may result from the experience of stereotype threat. For example, stereotype-threatened individuals may experience reduced self-efficacy in stereotype-relevant domains (Aronson & Inzlicht, 2004), lower their aspirations and desire to pursue stereotype-relevant careers (Davies, Spencer, Quinn, & Gerhardstein, 2002; Davies, Spencer, & Steele, 2005), and suffer negative medical and psychological health consequences, including increased general anxiety (Ben-Zeev, Fein, & Inzlicht, 2005; Bosson, Haymovitz, & Pinel, 2004), blood pressure (Blascovich, Spencer, Quinn, & Steele, 2001), and feelings of dejection (Keller & Dauenheimer, 2003).

Other research has focused on uncovering the moderating variables that make settings more likely to elicit stereotype threat and individuals more prone to experience it. For example, research suggests that stereotype threat is more likely to occur in settings in which an individual is a token group member (Inzlicht & Ben-Zeev,

2000; Sekaquaptewa & Thompson, 2002) and in individuals who are high in stigma consciousness (Brown & Pinel, 2003), who highly identify with their group (Marx, Stapel, & Muller, 2005; Schmader, 2002), who endorse or accept that stereotypes about their group might be true (Schmader, Johns, & Barquissau, 2004), and who identify with, are successful in, or base their self-worth on the stereotyped domain (Aronson et al., 1999; Stone et al., 1999).

Stereotype Threat Conceptualized

The above overview, although far from exhaustive, illustrates the richness of the stereotype threat research program and many of its clear successes. It is surprising, then, that articles reporting such research findings are often vague, and sometimes even internally inconsistent, in how they define stereotype threat. This lack of clarity becomes even more apparent as one notes the disparate definitions available within the larger population of published articles, commentaries, and textbooks.

Stereotype threat, broadly speaking, occurs “whenever there is a negative group stereotype, a person to whom it could be applied, and a performance that can confirm the applicability of the one to the other” (Steele et al., 2002, p. 387); that is, stereotype threat is “the apprehension people feel when performing in a domain in which their group is stereotyped to lack ability” (Aronson & Inzlicht, 2004, p. 830). Why do individuals experience this apprehension? Steele and colleagues (2002) suggest that this threat occurs because an individual is afraid of the implications of confirming the stereotypes in another’s eyes: “Such, then, is the hypothesized nature of stereotype threat—not an abstract threat, not necessarily a belief or expectation about one’s self, but the concrete, real-time threat of *being judged and treated poorly* [italics added] in settings where a negative stereotype about one’s group applies” (p. 385).

Throughout the past 10 years, definitions of stereotype threat have both paralleled and deviated from the conceptualization provided by Steele and colleagues. For example, Crocker (1999) defined stereotype threat as “the risk of being judged in light of negative stereotypes about one’s group” (p. 1), a definition that closely maps onto Steele and colleagues’ (2002) focus on the concern one may have about how one will be viewed and treated by others. In contrast, some researchers have focused more on features of the self, emphasizing concerns that targets may have about actually possessing the stereotypic attribute. For instance, stereotype threat has been presented as the “concern and anxiety over *confirming, as a self-characteristic* [italics added], a negative stereotype about one’s group” (Kray, Thompson, & Galinsky, 2001, p. 943) or as a threat

that “arises whenever *individuals’ behavior could be interpreted in terms of a stereotype* [italics added], that is, whenever group members run the risk of substantiating the stereotype” (Croizet & Claire, 1998, p. 589).

Others have focused on the group, suggesting that stereotype threat is the pressure that exists when one’s “performance on a particular task might *confirm a negative stereotype about one’s group* [italics added]” (Bosson et al., 2004, p. 247) or that one “could be seen as *confirming a negative social stereotype about their ingroup* [italics added]” (Schmader & Johns, 2003, p. 440). Marx and colleagues (2005) have taken a similar approach: “In our opinion, when attempting to further the understanding of stereotype threat, it seems sensible to focus on processes related to thoughts about one’s group and the associated stereotype because those thoughts are clearly relevant to the main assumption of stereotype threat theory (Steele, 1997; Steele et al., 2002)” (p. 432).

Others have blended these more specific characterizations: “Stereotype threat has been characterized as a psychological predicament in which individuals are inhibited from performing to their potential by the recognition that possible failure could confirm a negative stereotype that applies to their in-group and, by extension, to themselves” (Schmader, 2002, p. 194). As another example, “Theorists define stereotype threat as a state of self-evaluative threat, whereby anxiety about confirming a negative stereotype in others’ eyes, or in one’s own, produces behavior that is consistent with and confirms the stereotype” (Koenig & Eagly, 2005, p. 489).

The above examples represent a range of ways in which researchers have conceptually characterized stereotype threat. As illustrated above, some researchers have focused on definitions of stereotype threat congruent with Steele and colleagues’ (2002) conceptualization, whereas others have taken somewhat different approaches. These disparate definitions suggest particularly meaningful differences in what stereotype-threatened individuals are presumably threatened by and suggest that there exists an understanding in the field—at least when surveyed in the aggregate—that different forms of stereotype threat may exist.

Stereotype Threat Measured

Just as researchers vary in their conceptual definitions of stereotype threat, they also vary in how they assess stereotype threat. To this point, no existing measurement tools have been accepted as standard by the field. Instead, researchers have employed a diverse set of self-generated measures designed to assess the extent to which stereotype threat is activated or experienced by the participant. For example, Steele and Aronson (1995) asked participants the extent to which they

agreed with statements such as “The experimenter expected me to do poorly because of my race” and “My race does not affect people’s perceptions of my verbal ability” (p. 806). Consistent with Steele and colleagues’ (2002) conceptual definition of stereotype threat, these questions focus on the participants’ concerns with how others will see them in a stereotype-relevant situation.

Alternatively, others ask questions that focus more on threats to the group. For example, Schmader and Johns (2003) asked participants the extent to which they agreed with statements such as “I am concerned that the researcher will judge [women/men], as a whole, based on my performance on this test” and “The researcher will think that [women/men], as a whole, have less math ability if I do not do well on this test” (p. 443).

Yet, others employ multiple measures of stereotype threat that differ in their apparent conceptual focus. For instance, Cohen and Garcia (2005) measured what they labeled “stereotype threat” with the single item, “In school, I worry that people will draw conclusions about my racial group based on my performances” (p. 568), focusing, similar to Schmader and Johns (2003), on the implications of an individual’s own performance for his or her group. However, Cohen and Garcia (2005) also measured what they called the general “threat of being stereotyped” with the item “In school, I worry that people will draw conclusions about me, based on what they think about my racial group” (p. 568), an item that more closely parallels Steele and Aronson’s (1995) conceptualization and measurement of stereotype threat.

Finally, others aggregate across items worded to focus on both the self and the group, not differentiating between the two foci. For example, Marx and colleagues (2005) combine items such as “I worry that my ability to perform well on math tests is affected by my gender” (a self-focused question) and “I worry that if I perform poorly on this test, the experimenter will attribute my poor performance to my gender” (a group-focused question, p. 436).

One implication of the use of multiple measures, all purporting to assess the construct of stereotype threat, is that researchers and readers may come to believe that these measures assess the same construct when, in fact, they may not. Of course, as with the variability observed in conceptualizations of stereotype threat, the variability in measures used to assess stereotype threat may suggest a recognition, at least across the field in its aggregate, that there exist distinct stereotype threats.

Stereotype Threat Manipulated

Manipulations of stereotype threat, similar to conceptual definitions and measures of stereotype threat, also differ greatly across research labs and studies. For instance, stereotype threat has been elicited by having

participants identify their group membership prior to a stereotype-relevant performance (Steele & Aronson, 1995), explicitly reminding participants of the negative stereotypes about their group (Aronson et al., 1999; Spencer et al., 1999), making participants token members of their groups (e.g., Inzlicht & Ben-Zeev, 2000), having participants complete a questionnaire regarding common stereotypes of their group (e.g., Shih, Ambady, Richeson, Fujita, & Gray, 2002), having participants watch TV commercials that portray members of their group stereotypically (e.g., Davies et al., 2002), having participants answer questions about the effects of negative stereotypes on them (e.g., Josephs, Newman, Brown, & Beer, 2003), labeling participants’ performance as diagnostic of their standing on a negatively stereotyped trait or ability (e.g., Frantz et al., 2004; Kray et al., 2001; Marx et al., 2005; Steele & Aronson, 1995; Stone, 2002), and telling participants their participation will help inform an understanding of group differences (Aronson et al., 1999; Brown & Pinel, 2003; Keller & Dauenheimer, 2003; O’Brien & Crandall, 2003; Spencer et al., 1999). Moreover, many studies of stereotype threat employ combinations of the above-listed manipulations.

Of course, a multimethod approach with variability in the manipulation of a (single) construct is generally considered ideal practice. Perhaps these alternative manipulations are merely interchangeable operationalizations of a common, singular construct. Very often, however, different manipulations actually engage different constructs. We suspect this often may be the case in the stereotype threat literature, especially given that some manipulations explicitly emphasize the implications of a performance for oneself, whereas others emphasize the implications of a performance for one’s group. If so, the labeling of a variety of operationalizations as manipulations of a singular stereotype threat may mask the presence of multiple, distinct forms of stereotype threat.

Assessing the Consequences of Stereotype Threat

In contrast to the wide range of conceptual definitions, measures, and manipulations of stereotype threat, the dependent measures used in stereotype threat research have been relatively narrow in their scope. Specifically, most studies employ GRE-like measures of performance in academic achievement domains (e.g., Brown & Pinel, 2003; Croizet & Clarie, 1998; Quinn & Spencer, 2001; Spencer et al., 1999; Steele & Aronson, 1995), both to demonstrate the consequence of stereotype threat and to infer its presence. Undoubtedly, clear benefits may be gained by focusing on academic performance—benefits related to real-world social problems and applications. There are reasons to believe, however,

that academic performance may be neither the most important consequence of stereotype threat nor the most effective measure for inferring its existence.

First, although specific academic performances have great implications for individuals, other potential consequences of stereotype threat, such as avoidance, disengagement, or disidentification with the negatively stereotyped domain (e.g., Davies et al., 2002, 2005; Major & Schmader, 1998; Major, Spencer, Schmader, Wolfe, & Crocker, 1998; Osborne, 1995), may be especially likely to have lasting consequences.

Second, the psychology of stereotype threat is proposed to emerge when an individual believes that his or her behavior potentially provides evidence relevant to a negative stereotype. Academic performances certainly fit this bill when the threatening stereotype itself is about intellectual capacity or ability. However, not all groups are stereotyped in academic domains. Nonacademic "performances" are relevant to other threatening stereotypes, such as when a heavy-set woman super-sizes her Big Mac and fries in the mall food court, a Catholic priest supervises a church boys' group on a camping trip, or a female assistant professor in an engineering department leaves a faculty meeting early to pick up her son at day care. Moving beyond achievement tests thus opens up the concept of stereotype threat to a wider range of (understudied) negative stereotypes and to a wider population of (understudied) groups potentially targeted by negative stereotypes (e.g., Bosson et al., 2004).

Third, and most important given our current aims, a focus on simple stereotype-relevant performance measures—academic or otherwise—may serve to mask the presence of theoretically differentiable types of stereotype threat, thereby slowing the development of stereotype threat theory. There is still some debate regarding the mechanisms through which the experience of stereotype threat leads to hindered test performance (e.g., by enhancing arousal, increasing anxiety, amplifying the number of negative thoughts, interfering with problem-solving strategies, reducing working memory capacity, reducing task confidence and performance expectations, etc.; Ben-Zeev et al., 2005; Cadinu, Maass, Rosabianca, & Kiesner, 2005; Ford, Ferguson, Brooks, Hagadone, 2004; O'Brien & Crandall, 2003; Quinn & Spencer, 2001; Schmader & Johns, 2003; Stangor, Carr, & Kiang, 1998). Nonetheless, because each form of stereotype threat has the potential to engage these putative mechanisms, each would be expected to lead to performance decrements. That is, regardless of whether one is concerned that the group stereotype may be true of oneself, that one's performance may harm one's group, and so forth, the very experience of threat, per se, may inhibit performance because of its general effects on arousal, working memory capacity, and so on.

Given the possibility that qualitatively distinct forms of stereotype threat may elicit similar decrements in test performance, researchers and interventionists interested solely in test performance might question the usefulness of differentiating among these threats. As our discussion below will reveal, however, the benefits of this finer grained analysis are likely to be especially great for those with applied interests. First, generalizing from a broad stereotype threat may lead one to miscalculate for whom and under what conditions performance decrements will emerge. Moreover, because different stereotype threats likely require different interventions to remediate—a point we address later—a failure to consider the distinct forms of stereotype threat operating on particular individuals in particular contexts may lead one to employ interventions that will be ineffective for, or even detrimental to, victims of stereotype threat.

In sum, the use of academic performance measures as the gold-standard indicator of stereotype threat is unlikely to reveal the presence of qualitatively distinct stereotype threats, the conditions that elicit each threat, or the effectiveness of intervention strategies for remedying these threats. In contrast, we discuss later an assortment of other outcomes and processes that not only illustrate the wide-ranging practical implications of the multiple stereotype threats but also have great value for differentiating among them.

Target Groups Used as Participants

Most studies in this literature focus on the stereotype threat faced by ethnic minority groups and women. Besides issues related to convenience—such individuals are relatively easy to recruit through existing university subject pools—this focus likely stems from the applied motivation to better understand the predicaments faced by these particular groups. Certainly, this is a legitimate rationale. Moreover, if one believes that stereotype threat is a singular construct, and that it is a situational threat that can therefore apply to any group, it makes sense to presume that the findings from studies using these groups will both generalize to other groups and provide a solid foundation for articulating stereotype threat theory.

A close reading of the literature, however, suggests that these assumptions may be unwarranted. For example, some stereotype threat research suggests that the threat is rooted in one's collective self-construal (e.g., Marx et al., 2005) and that belonging to, and identifying with, one's groups increases stereotype threat effects (e.g., Bergeron, Block, & Echtenkamp, 2006; Marx et al., 2005; Schmader, 2002). Yet, stereotype threat effects have been observed in individuals of low socioeconomic status (SES; Croizet & Claire, 1998) and in mentally healthy students who were told that observers believed

them to suffer from a mental disorder (Farina, Allen, & Saul, 1968). Both sets of individuals are unlikely to highly identify with their stigmatized groups or feel a strong sense of “we” when thinking about sharing these characteristics with other group members.

Other research suggests that individuals must identify with the stereotyped domain—feel that the domain is important to one’s sense of self—to experience stereotype threat (e.g., Aronson et al., 1999; Steele et al., 2002). Indeed, this assumption is so well accepted that many researchers limit their study participants to those who highly identify with the stereotyped domain (e.g., Aronson et al., 1999; Ben-Zeev et al., 2005; Brown & Pintel, 2003; Josephs et al., 2003; Quinn & Spencer, 2001; Schmader, 2002; Schmader & Johns, 2003; Spencer et al., 1999). Yet, other research observes stereotype threat effects among individuals highly unlikely to identify with a particular negatively stereotyped domain, such as homosexuals in the domain of preschool care (Bosson et al., 2004) and men in the domain of emotional sensitivity (Leyens et al., 2000; Marx & Stapel, 2006).

We see here, then, two examples of how findings derived from research on some groups may not help us to effectively understand the threat experienced by members of other stigmatized groups: Feeling a strong collective self-construal or identification with the stereotyped group seems important for the emergence of stereotype threat for some groups but not others; identification with the negatively stereotyped domain seems important for the emergence of stereotype threat for some groups but not others. We suggest that these apparent inconsistencies stem from an underdeveloped appreciation of the possibility that there exist multiple, qualitatively distinct forms of stereotype threat and that these different forms may be activated by different events and may be differentially relevant to different kinds of negatively stereotyped groups.

Interim Summary

A close look at this important literature reveals that “stereotype threat” often means quite different things to different researchers and that it often has been employed to describe and explain distinct processes and phenomena. Research has manipulated and measured stereotype threat in multiple ways while also being perhaps too consistent in the ways in which it has assessed the effects of stereotype threat and has selected groups to study. We believe that these features hinder the development of stereotype threat theory and suspect that they emerge largely from an assumption that stereotype threat is a singular construct. That such an assumption may be wrong is implicit in the various (albeit unsystematic) ways in which stereotype threat has been characterized and defined.

Some stereotype threat theorists have suggested the possibility of multiple forms of stereotype threat. For example, Aronson, Quinn, and Spencer (1998) wrote that “stereotype threat can be thought of as the discomfort targets feel when they are at risk of fulfilling a negative stereotype about their group; the apprehension that they could behave in such a way as to confirm the stereotype—in the eyes of others, in their own eyes, or both at the same time [italics added]” (pp. 85-86). Indeed, as early as 1999, Aronson and colleagues called on researchers to examine and understand the potentially different threats underlying the general umbrella of stereotype threat:

Is stereotype threat self-threatening because it arouses a fear of being a bad ambassador of one’s group to mainstream society? Or is it more simply the apprehension about appearing incompetent—for the sake of one’s own reputation? Or, alternatively, is it merely the result of worrying that one might lack ability? Or is it some combination of these concerns? These are important questions that will have to await the results of future research for answers. (p. 43)

The Multi-Threat Framework we describe below addresses these questions, and others, in an attempt to facilitate a clearer understanding of general stereotype threat phenomena and to increase the applicability of stereotype threat theory to a greater number of negatively stereotyped groups. At the root of our framework is the claim, consistent with the statement above by Aronson and colleagues (1999), that stereotype threat, as a universal concept, comprises multiple, qualitatively distinct, stereotype threats.

A MULTI-THREAT FRAMEWORK

We begin by positing the existence of six qualitatively distinct core stereotype threats. These threats emerge from a consideration of two dimensions—the target of the threat (the self or one’s group) and the source of the threat (the self, outgroup others, or ingroup others). The intersection of these dimensions results in stereotype-based threats to one’s personal self-concept, to one’s group-concept, to one’s personal reputation in eyes of outgroup members, to one’s group’s reputation in the eyes of outgroup members, to one’s personal reputation in the eyes of ingroup members, and to one’s group’s reputation in the eyes of ingroup members (see Table 1).

Self-Concept Threat is the fear of stereotypic characterization in “one’s own eyes”—the fear of seeing oneself as actually possessing the negative stereotypic trait. For example, James, an African American man, might fear that a poor performance on an academic exam will support the hypothesis lurking within the recesses of his

TABLE 1: Six Qualitatively Distinct Stereotype Threats Emerge From the Intersection of Two Dimensions: Source of the Threat and Target of the Threat

Source of the Threat	Target of the Threat	
	Self	Group
Self	Self-Concept Threat Fear that my behavior will confirm, in my own mind, that the negative stereotypes held of my group are true of me	Group-Concept Threat Fear that my behavior will confirm, in my own mind, that the negative stereotypes held of my group are true of my group
Outgroup Members	Own-Reputation Threat (Outgroup) Fear that my behavior will confirm, in the minds of outgroup members, that the negative stereotypes held of my group are true of me, and I will therefore be judged or treated badly by outgroup members	Group-Reputation Threat (Outgroup) Fear that my behavior will confirm, in the minds of outgroup members, that the negative stereotypes held of my group are true of my group and my group will therefore be judged or treated badly by outgroup members
Ingroup Members	Own-Reputation Threat (Ingroup) Fear that my behavior will confirm, in the minds of ingroup members, that the negative stereotypes held of my group are true of me and I will therefore be judged or treated badly by ingroup members	Group-Reputation Threat (Ingroup) Fear that my behavior will confirm, in the minds of ingroup members, that the negative stereotypes held of my group are true of my group and my group will therefore be judged or treated badly by ingroup members

own mind that he is indeed, by virtue of his race, less intelligent than his European American classmates.

Group-Concept Threat is the fear of seeing one's group as possessing the negative stereotypic trait—the fear that one's performance will confirm to oneself that the group to which one belongs is legitimately devalued. Thus, James might fear that an inadequate performance on an academic exam will confirm in his own mind the stereotype that African Americans are less intelligent than European Americans.

Own-Reputation Threat (Outgroup) is the fear of stereotypic characterization in the eyes of outgroup others—the fear of being judged or treated badly by outgroup others because they may see one as being negatively stereotypical. For example, James may fear that a poor performance on an academic exam would enable a European American employer, coworker, teacher, or friend to judge him based on negative stereotypes about African American intelligence and thereby treat him in an unfavorable manner.¹

Group-Reputation Threat (Outgroup) is the fear of reinforcing negative stereotypes about one's group in the minds of outgroup others—the fear of being a bad ambassador for one's group. James's concern in this case would be that a poor performance on the exam would reinforce, in a European American individual's mind, negative stereotypes about African American intelligence.

Own-Reputation Threat (Ingroup) is the fear of stereotypic characterization in the eyes of one's ingroup—the fear of being judged or treated badly, or even rejected, by one's ingroup. For example, James may fear that a poor performance on an academic exam would demonstrate that the negative stereotypes are true of him, leading an African American employer, coworker, or friend to judge or treat him badly.

Finally, *Group-Reputation Threat (Ingroup)* is the fear of reinforcing negative stereotypes about one's group in the minds of other ingroup members—the fear that one's performance will confirm to other members of one's group that one's group is legitimately devalued. James's concern in this case would be that a poor performance on the exam would reinforce, in the minds of other African Americans, that African Americans are truly less intelligent than European Americans.

Although we consider these six threats to represent well the core of the broader stereotype threat construct, we do not believe they comprise the full set of stereotype threats. Rather, these core threats also serve as building blocks with which other stereotype threats can be straightforwardly derived, as combinations of core threats and/or as slight adaptations of them. Consider, for example, that James may fear being judged or treated badly, or even rejected, by other African Americans because they believe that James's poor performance on an academic exam could reinforce negative stereotypes about African Americans in the minds of outgroup others; that is, one may fear that ingroup members would react strongly to a poor academic performance, not because it would lead them to believe that the stereotypes might be true of themselves or their group but because it would provide outgroup members with yet another apparent confirmation of the stereotype and potentially result in the poor treatment of ingroup members by the outgroup observer.

This new threat emerges largely as a combination of *Own-Reputation Threat (Ingroup)*—the fear that one's ingroup will view, judge, or treat one badly as a result of a stereotype-consistent performance—and *Group-Reputation Threat (Outgroup)*—the fear of reinforcing negative stereotypes about one's group in the minds of

outgroup others. This threat of being viewed as a “black sheep” (e.g., Eidelman & Biernat, 2003) may be a very common variant of the six core threats, if not one of the more powerful ingroup-as-source threats. More broadly, this example points to the possibility that there exist compelling stereotype threats beyond the core six; we return to the issue of combined threats later. However, we focus primarily in this article on the core threats because they provide the conceptual foundation necessary to both predict and understand the broader census of stereotype threats.

The six proposed threats, and combinations and adaptations of them, share some common elements. They each result from the predicament of being a member (or being perceived as a member) of a group that one believes is targeted by negative stereotypes; they are each elicited by the possibility that one’s behavior in a negatively stereotyped domain can form the basis of some form of evaluative inference and, as a result, they each involve anxiety or apprehension. Nonetheless, they differ in quite important ways: They are elicited by qualitatively distinct conditions, are facilitated and attenuated by somewhat distinct person and situation factors, lead to different coping and compensatory strategies, and will require distinct intervention strategies to mitigate.

Different Conditions Engage Different Threats

The presence of conceptually differentiable stereotype threats raises the logical possibility that these threats may be elicited by different conditions. As presented in Table 2 and described in more detail below, each condition should be necessary (but not sufficient) to elicit at least one, but not all, of the proposed stereotype threats.

We illustrate our claim that different sets of conditions may engage different threats by discussing each of these conditions, in turn, highlighting their relevance to some threats and, importantly, their irrelevance to others; this approach parallels a perusal of Table 2 by row, scanning across the columns defined by threat type. Alternatively, one could illustrate the same general point by focusing on each threat type, articulating for each threat the set of conditions necessary for its experience; the reader interested in this type-based approach can do so by perusing Table 2 by column, scanning down each column, in turn. Regardless of approach, however, the message is the same: Different threats are likely to be engaged by different sets of conditions.

Note that most of these conditions can either be cued by salient situations or exist as dispositional inclinations. For example, one condition we discuss below is the belief that others endorse the negative stereotypes about one’s group—a belief that is necessary for the experience of some forms of stereotype threat but not

others. This belief can be activated either by the situation, such as when a potential evaluator makes a blatant stereotypical comment, or may be chronically active by disposition, such as for an individual who possesses a chronically high level of stigma consciousness.

Conditions That Determine the Source(s) of Stereotype Threat

Believed public visibility of one’s stereotype-relevant performance. To experience the four “other-as-source” threats (i.e., the two own-reputation and two group-reputation threats), one must believe that one’s stereotype-relevant behavior is available to outgroup or ingroup others; one will not worry about confirming the stereotype in another’s mind if one believes one’s behavior to be private. This does not mean, of course, that the potential target of negative stereotypes needs to believe that he or she is currently in the actual presence of evaluating others; believing that others at some later point will have access to one’s actions may do. It does mean, however, that to experience the other-as-source threats one must have salient in one’s mind—at the time of one’s performance—an external audience that will have access to one’s stereotype-relevant actions.

Although the other-as-source threats will only be experienced when one’s actions are believed to be public, the two “self-as-source” threats (Self-Concept Threat, Group-Concept Threat) can be experienced even when stereotype-relevant behaviors occur privately. For example, even if no others will ever know how James performs on a stereotype-relevant exam, James will know, and this knowledge makes possible the experience of Self-Concept Threat or Group-Concept Threat.

Recognizing that one belongs to a negatively stereotyped group. To the extent that one recognizes that he or she is classifiable as a member of a negatively stereotyped group, one is at risk for the self-as-source stereotype threats. James, merely knowing that he is African American, also likely knows that there exist negative stereotypes that he can potentially apply to himself or to his group more generally. Note that an individual can recognize that he or she belongs to a group without psychologically identifying with that group. James could thus experience the self-as-source threats even while caring little about whether he is African American; we expand on this later.

An individual who does not recognize that he or she belongs to the group—for example, an individual objectively diagnosable as being depressed but who knows nothing of this potential diagnosis—will not fear that she, or her group, possesses the negative stereotypical characteristics typically attributed to depressed people

TABLE 2: Profile of Eliciting Conditions Necessary to Yield Each of the Proposed Stereotype Threats

For One to Experience _____ Threat, the Following Need to Be True:	Self-Concept	Group Concept	Own Reputation (Outgroup)	Group Reputation (Outgroup)	Own Reputation (Ingroup)	Group Reputation (Ingroup)
Need to identify with the stereotyped domain	X					
Need to believe that the stereotype might be true of oneself	X					
Need to care about the implications of one's stereotype-relevant actions for the way one sees oneself	X					
Need to recognize that one belongs to the group	X	X		X	X	X
Need to believe one's stereotype-relevant actions are public to outgroup others			X	X		
Need to believe the stereotype-relevant actions are linked to oneself	X		X		X	
Need to care about the implications of one's stereotype-relevant actions for the way outgroup others see oneself			X			
Need to believe that outgroup others think the stereotype might be true of oneself			X			
Need to believe that outgroup others recognize one belongs to the group			X	X		
Need to believe the stereotype might be true of the group		X				
Need to care about the implications of one's stereotype-relevant actions for the way one sees the group		X				
Need to see oneself as representing the group		X		X		X
Need to identify with the group		X		X	X	X
Need to believe that outgroup others think the stereotype might be true of the group				X		
Need to care about the implications of one's stereotype-relevant actions for the way outgroup others see the group				X		
Need to believe the stereotype-relevant actions are linked to the group				X		X
Need to believe one's stereotype-relevant actions are public to ingroup others		X			X	X
Need to believe that ingroup others recognize one belongs to the group					X	X
Need to care about the implications of one's stereotype-relevant actions for the way ingroup others see oneself					X	
Need to believe that ingroup others think the stereotype might be true of oneself					X	
Need to believe that ingroup others think the stereotype might be true of the group						X
Need to care about the implications of one's stereotype-relevant actions for the way ingroup others see the group						X

(i.e., will not experience the self-as-source threats). Note also that an individual can believe that he or she belongs to a negatively stereotyped group and thus experience the self-as-source threats even while knowing that others are unaware of his or her group membership (thereby eliminating the possibility of other-as-source threats). For example, Linda, diagnosing herself as clinically depressed and knowing the negative stereotypes that accompany the label, is at risk for the self-as-source threats even though no one else may know she is depressed—or even if, objectively, this diagnosis is incorrect. Thus, individuals who have effectively concealed their stigmatizable conditions may be susceptible to the self-as-source forms of stereotype threat even though they may not be susceptible to the other-as-source forms of stereotype threat.

Believing that others recognize that one belongs to a negatively stereotyped group. James, believing that his skin color identifies him to outgroup or ingroup others as African American, will be susceptible to the other-as-source threats. In contrast, an individual who believes that others do not recognize that he or she belongs to the group—for example, an individual who effectively conceals his or her group membership—will not worry about engaging in stereotype-consistent behaviors in front of these observers.

Again, however, note that James need not identify with being African American to experience these threats: He can still be concerned that others will treat him poorly because he is African American, even if being African American is not an important part of how he views himself. As a second example, Linda may recognize that she

is diagnosed as clinically depressed, but she may not consider herself as belonging to, or identifying with, clinically depressed people. However, when Linda is at family functions or at work—two places where people know she has been diagnosed with depression—she might worry that the people in her environment will view and treat her in line with their negative stereotypes about depressed people (thus putting her at risk for Own-Reputation Threat [Outgroup]).

Note also that one need not actually belong to a negatively stereotyped group to experience the other-as-source threats: As long as one merely believes that one *can be labeled* as a member of such a group, one may fear being seen, judged, or treated poorly because of the negative stereotypes associated with that label. For example, a woman who has always been thin may worry that others perceive her as having an eating disorder, or a heterosexual man with a high-pitched voice may worry that others will label him as gay, and both may therefore fear others' unfavorable stereotype-based judgment and treatment.

Personally believing that the negative stereotype might be true. If one has no faith in the veracity of this stereotype, one need not fear that one's own actions would make that stereotype true in one's own mind. Alternatively, personally believing that the negative stereotype is, or could be, true makes one vulnerable to the self-as-source threats but not necessarily to the other-as-source threats. We can make a further distinction here between the two self-as-source threats: Self-Concept Threat requires one to believe that the stereotype is or could be true of the self, whereas the Group-Concept Threat requires one to believe that the stereotype is or could be true of the group.

Note that the self-as-source threats may be experienced even when one knows that others do not believe the negative stereotype to be true. Even if James knows that his teachers do not believe that African Americans lack academic ability, James will be susceptible to the self-as-source threats if he believes that the stereotype could be valid.

Believing that others think the negative stereotype could be true. Believing that outgroup or ingroup others think the negative stereotype is, or could be, true is necessary to make one vulnerable to the other-as-source threats, but not necessarily the self-as-source threats. Note that these other-as-source threats can be experienced even when the target does not personally believe the negative stereotype to be true: Even if James does not believe the stereotype to be true, as long as he believes that an observing other endorses the stereotypes, he is at risk for experiencing other-as-source threats.

In contrast, if one believes that others do not subscribe to the stereotype, one need not fear that one's own actions would make that stereotype true in others' minds. Even if James, for instance, knows that others will learn of his performance and link it both to his group membership and personal identity, he will not experience the other-as-source threats if he believes that the observing others consider the negative stereotype to be invalid. As mentioned above, this absence of the other-as-source threats would hold even if James himself believes that the stereotypes could be true because personally believing the stereotype could be true should only lead James to be susceptible to the self-as-source threats.

The type of other-as-source threat that will be experienced will depend on whether one thinks the source believes the stereotype is (or can be) true of the *group* or of the *self*. To experience the Own-Reputation (Outgroup) and Own-Reputation (Ingroup) threats, one must believe that the source of the threat thinks the stereotype may be true of oneself. For example, even if James knows that an observing ingroup or outgroup member does not place any credibility in the stereotype as applied to the group in general but believes that the observer thinks the stereotype may be true of James—that James lacks intelligence—James will be at risk for these own-reputation threats. Of interest, the ingroup members capable of eliciting the greatest amount of Own-Reputation Threat (Ingroup) may be those who are *least* likely to endorse publicly the general stereotypes (e.g., ingroup activists) because they have the greatest investment in promoting counterstereotypic portrayals of the group. If James believes that his test performance will become known to the president of the Black Student Association, for instance, he may experience an especially great burden to engage in counterstereotypic behavior.

In contrast, to experience the two group-reputation threats (Group-Reputation [Outgroup] and Group-Reputation [Ingroup] Threats), one must believe that the source of the threat thinks the negative stereotype may be true of the group; that is, if James believes that an observer thinks that African Americans lack intellectual ability, James may worry that his performance could confirm this observer's hypothesis. Of interest, the experience of these threats may be greatest when one believes that the observer has yet to fully commit to believing the stereotype, as it is here that one's performance has the potential to secure in the mind of the observer the validity of the stereotype.

In sum, several conditions work together to determine whether the source of the threat is the self or (outgroup or ingroup) others—the extent to which one believes that one's stereotype-relevant performances are publicly visible, knows that one belongs to a negatively stereotyped group, believes that others think one belongs to a

negatively stereotyped group, personally believes that the negative stereotypes about one's group could be true, and believes that others think the negative stereotypes about one's group could be true. We turn now to discuss the conditions that work together to influence whether the target of the threat is the self or the group.

Conditions That Determine the Target(s) of Stereotype Threat

Belief that one's stereotype-relevant actions can be linked to oneself. Stereotype-relevant actions differ in whether they can be linked to the target or to the target's group. Of course, because the target usually knows that he or she is doing the behavior, and also knows his or her own group membership, this distinction is relevant primarily as it relates to the information available to outside observers and thus to the other-as-source threats.

When one believes that a performance in the negatively stereotyped domain is publicly linked to one personally, one becomes vulnerable to the self-as-target reputation threats (Own-Reputation Threat [Ingroup], Own-Reputation Threat [Outgroup]). For example, if James knows that those observing his actions will be able to identify both him and his (negatively stereotyped) group, he is at risk for experiencing Own-Reputation Threat (Outgroup) and Own-Reputation Threat (Ingroup). In contrast, if this same performance cannot be linked to James personally, or if those with access to it will not know he is African American, he should not experience these threats because his performance would not be able to confirm in the minds of others that the negative stereotypes are true of *him*.

Belief that one's stereotype-relevant actions can be linked to one's group. When one believes that a performance in the negatively stereotyped domain is publicly linked to the group, one becomes vulnerable to the group-as-target reputation threats (Group-Reputation Threat [Ingroup], Group-Reputation Threat [Outgroup]). Thus, even if James knows that there is no personally identifying information associated with his performance (thereby eliminating the own-reputation threats), he will remain vulnerable to the group-reputation threats if he believes that others can label his performance as generated by an African American because under this circumstance he would be in a position to let his group down.

Identifying with the domain. Domain identification—caring about the negatively stereotyped domain and placing a high level of importance on it for one's self concept—should be necessary to elicit Self-Concept Threat; if one does not care about possessing the negatively stereotypic trait, one's self-concept cannot be threatened by the possibility that one indeed possesses it.

Note that the absence of domain identification should not preclude the possibility of experiencing the other five stereotype threats. For example, one can experience the group-as-target threats even if one does not *personally* care about the domain in which one's group is negatively stereotyped. For instance, as long as James cares about seeing his group in a positive light (or about having others see his group in a positive light), the importance he places on the domain of intelligence for himself is irrelevant because a poor performance on a test of intelligence may legitimize in James's mind (or in the minds of others) the stereotype that African Americans are intellectually inferior. Similarly, one can experience the remaining self-as-target threats even if one does not personally care about the stereotyped domain: One need not identify with the domain to fear an observer's stereotype-based judgment and treatment in that domain.

Identifying with the group. As mentioned earlier, just because one recognizes that one belongs to a group does not mean that one identifies with that group (i.e., derives a strong sense of identity from being a member of that group). However, identifying with the group should be necessary for the experience of the group-as-target threats as well as for those threats that have the ingroup as their source. For instance, if James derives a strong sense of his identity from being African American, he should feel apprehensive when in a situation that can support the stereotype that African Americans are less intelligent. However, if being African American is irrelevant to his identity, James is unlikely to care about the implications of his own actions for how he views African Americans, for how others view African Americans, or for how other African Americans view him.

Because the self-as-target threats emerge from the concern that negative stereotypes can be used to interpret one's own abilities, identifying with one's group should be irrelevant for the experience of most of these threats. If James does not care that he's African American—and even if he explicitly *rejects* identification and association with African Americans—he would still be susceptible to Self-Concept Threat (one need not identify with the group to fear that the stereotypes might be true of the self) or Own-Reputation (Outgroup) Threat (one need not identify with the group to fear an observer's stereotype-based judgments). As another example, consider that an obese woman, who fears that she may in fact possess the negative characteristics stereotypically associated with obesity (e.g., laziness), may experience Self-Concept Threat even if she does not personally identify with “overweight people,” care about the implications of her own behavior for how overweight people are viewed, or care about how other obese people view her.

Seeing oneself as representing the group. Feeling that one represents one's group should be necessary for experiencing the group-as-target threats. If one sees oneself as a legitimate exemplar of one's group, then one is at risk for experiencing Group-Concept Threat; if one sees oneself as serving as a public face of one's group—as a representative of one's group to others—then one is at risk for the two group-reputation threats. For instance, if James does not think that others see him as representative of African Americans, he should believe they will not use his behaviors to adjust their views of African Americans and thus he should not be vulnerable to the experience of the group-reputation threats. Note that even if James does not feel that his actions will be used to represent the group, he remains at risk for the self-as-target threats because his actions still have the opportunity to represent his own abilities and his own or others' views of him.

Caring about the stereotype-relevant implications for the self. Caring about the stereotype-relevant implications for the self should be necessary to experience the self-as-target threats. For Self-Concept Threat to occur, James would need to care about the stereotype-relevant implications for the way he saw himself or what it would mean if he learned that he was truly less intelligent because he is African American. For the two own-reputation threats, James would need to care about the stereotype-relevant implications for the way outgroup or ingroup others saw him or what it would mean if an outgroup or ingroup other learned that he was truly less intelligent because he is African American. If James does not believe there will be negative implications of a stereotype-relevant behavior (e.g., he will not see himself negatively or an observer will not judge or treat him negatively), he will experience no self-as-target threats.

A number of factors may intensify or attenuate the extent to which one cares about the self-relevant implications of a stereotype-consistent performance. These may emerge or change as a function of situational or chronic factors. For example, the more one believes that the source of the threat views the stereotype-relevant domain as important (e.g., the more the source is domain identified), the more one should care about one's performance and thus the more one will be vulnerable to a self-as-target threat. For instance, if James believes that a group of academically successful African Americans will view his academic performance, he may worry about how these ingroup members will see, judge, or treat him (Own-Reputation Threat [Ingroup]), even if James does not personally identify with the domain of academic performance.

Moreover, the more important the source, the more one should care about one's performance and thus the more one will be vulnerable to the own-reputation

threats. For instance, members of stereotyped ethnic groups may find Own-Reputation Threat (Outgroup) to be most threatening when outgroup observers are members of the ethnic majority and thus are more likely to be in positions of greater power. Or, individuals highly invested in their standing within an ethnic group may find Own-Reputation Threat (Ingroup) most threatening when in the presence of ingroup observers for whom the stereotype-relevant domain is highly important.

Caring about the stereotype-relevant implications for the group. Caring about the stereotype-relevant implications for the group should be necessary for the experience of the group-as-target threats. For Group-Concept Threat to occur, James would need to care about the stereotype-relevant implications for the way he saw African Americans or what it would mean if he learned that African Americans are indeed academically deficient. To experience the two group-reputation threats, James would need to care about the stereotype-relevant implications for the way outgroup or ingroup others saw African Americans, or what it would mean if an outgroup or ingroup other came to believe, as a consequence of James's actions, that African Americans are academically deficient. If James does not believe there will be negative implications of a negative stereotype-relevant performance (i.e., that neither he nor others will view or treat African Americans negatively even if he performs poorly), then he will experience no group-as-target threats.

A number of factors may intensify or attenuate the extent to which one cares about the implications of a stereotype-relevant performance for the group, such as the perceived importance of the domain to the source of the threat, the importance of the source of the threat to the group, and the like.

In sum, several conditions work together to determine whether the target of the threat is the self or the group—the extent to which one believes that one's stereotype-relevant actions can be linked to oneself and/or one's group, identifies with the group, sees oneself as representing the group, and cares about the stereotype-relevant implications for the self and/or the group.

In all, we have overviewed a set of conditions that should be necessary to increase an individual's vulnerability to the different proposed threats. Although each condition is necessary for an individual to experience at least one of the six threats, no condition is sufficient for experiencing any of the threats. Rather, as summarized in Table 2 (and made most clear by scanning down the threat columns), each threat is proposed to be elicited by a necessary combination of conditions; these combinations differ for each of the six stereotype threats. For example, to experience Group-Reputation Threat (Outgroup), James must, at minimum,

possess the conditions identified in Table 2; that is, James must believe that his stereotype-relevant behavior is public and associated with the group, identify with the group, see himself as a representative of the group, believe that outgroup observers believe the stereotype is (or can be) true of the group, and care about the implications of a stereotype-relevant performance for the way observing outgroup others see the group. However, James need not be identified with the domain, personally believe that the stereotype is (or could be) true of himself, believe that he personally is associated with these stereotype-relevant behaviors, or believe that ingroup members will ever see this stereotype-consistent behavior.

This same analysis can be applied to predict the conditions that elicit other potential, as of yet uncharacterized, stereotype threats. As we described earlier, additional threats may be straightforwardly derived by combining core threats or adding additional personal or situational constraints to them. Recall, for instance, the example of the black sheep threat—the fear that fellow ingroup members would judge or treat one badly because one poorly represents the group to outgroup observers. This threat would seem to be a combination of Own-Reputation Threat (Ingroup)—the fear that one’s ingroup will view, judge, or treat one badly as a result of a stereotype-consistent performance—and Group-Reputation Threat (Outgroup)—the fear of reinforcing negative stereotypes about one’s group in the minds of outgroup others. Accordingly, the conditions necessary to elicit the black sheep threat will include a combination of many of the conditions necessary to elicit Own-Reputation Threat (Ingroup) and Group-Reputation Threat (Outgroup). For instance, one would need to believe that the stereotype-relevant actions are linked to oneself (a condition necessary to elicit Own-Reputation Threat [Ingroup]) and that outgroup others recognize one belongs to the group (a condition necessary to elicit Group-Reputation Threat [Outgroup]). However, the emergence of this threat also would require features possessed by neither of the core threats, such as the target’s belief that observing ingroup members believe that outgroup members also are observing. The general point here is that the same kind of analysis employed to predict the emergence of the six core threats—and, as we will see, the kinds of analyses employed in subsequent sections to predict likely moderating and mediating factors, successful forms of intervention, and so forth—can be employed to predict the emergence of additional stereotype threats as well.

Independence and Co-Occurrence of Stereotype Threats

Given that qualitatively different constellations of conditions elicit each of the six core threats, each threat can

be experienced independently of the others. For example, imagine a woman who identifies with the domain of math but wonders whether the negative stereotypes about women and math may indeed be true. She could experience Self-Concept Threat but no other threat if she does not care how other people see, judge, or treat her and if she never performs math-relevant tasks publicly. Now consider a woman who believes that others hold negative math-relevant stereotypes about women, that others value math achievement, and that she will be personally linked to her math performance. She could experience Own-Reputation Threat (Outgroup) but no other threat if she cares very little about her group (i.e., is low-group identified) and about math (i.e., is low-domain identified).

Although the threats can be experienced independently of one another, they can (and often will) co-occur, and in a manner predictable from our framework. Specifically, because some of the threats share common eliciting conditions, they should be more likely to co-occur than threats that share fewer (if any) eliciting conditions. For example, being highly identified with a particular group is a condition relevant to all of the threats that have the ingroup as a target or as a source. Thus, an individual who is highly identified with her group should have an increased likelihood of experiencing multiple group-as-target and group-as-source threats depending on the other situation- and individual-level variables present. In addition, if this group-identified individual also is highly identified with the domain—as is frequently the case in extant stereotype threat research given that it tends to employ college students engaging in academic tasks—this individual will be at risk for experiencing most of the proposed stereotype threats.

One last point bears noting, albeit briefly. Self-as-source threats can be experienced even when one’s stereotype-relevant performance occurs privately; this is not the case for the other-as-source threats, which require that one’s performance be public and linked in some way to the target or the target’s group membership. Of course, when a performance is available to others it will often (although not always) be available to the self as well. Thus, there should be an asymmetry in how the self-as-source and other-as-source threats covary: Relevant self-as-source threats will very often be experienced when conditions elicit other-as-source threats; relevant other-as-source threats will, with a much lesser likelihood, be experienced when conditions elicit the self-as-source threats.

In sum, although the six proposed core stereotype threats can be experienced independently of one another, they also can be experienced jointly, and will be to the extent that many eliciting conditions are present in the current situation or they share common eliciting conditions.

Different Stigmatizable Groups Should Experience Different Patterns of Stereotype Threats

To the extent that individuals belonging to different stigmatizable groups or conditions have different standings on the threat-eliciting circumstances just discussed, they should experience each of the stereotype threats to different degrees (and in different combinations). By examining the characteristics associated with particular stigmatizable group memberships, then, one can identify groups that, as a whole, are more (or less) vulnerable to particular stereotype threats.

For example, we have proposed that to experience the Own-Reputation and Group-Reputation Threats, one must (among other requirements) believe that others know that one possesses a particular stigmatizable characteristic. Thus, to the extent that one's stigmatizable characteristic is effectively concealed—as it often is, for example, for those who could be stigmatized on the basis of sexual orientation, mental illness, religion, or political ideology—one should be less susceptible to experiencing the (outgroup or ingroup) reputation threats but should remain susceptible to the self-as-source threats.

To take a second example, we have noted that possessing a stigmatizable characteristic does not imply that one will identify with others who also possess the characteristic. Indeed, such identification may be relatively rare among those with particular stigmatizable characteristics (e.g., those who are obese, who have certain mental illnesses, who have certain physical conditions). Such individuals should thus be less likely to experience the group-as-target threats or the threats in which the ingroup is the source of the threat. For instance, compared to individuals whose stigmatizable status is accompanied by relatively strong social identifications (e.g., members of ethnic minorities), we would expect obese men to be less likely to experience Group-Reputation Threat (Outgroup)—to worry that their actions may serve to reinforce in the minds of others negative stereotypes of obese individuals. Of course, such an individual will still be vulnerable to the threats that do not require group identification to be engaged.

As a third example, recall our suggestion that one will be more susceptible to the self-as-source threats—Self-Concept Threat and Group-Concept Threat—to the extent that one believes that the negative stereotypes about one's group could indeed be true. It is likely that members of some stigmatizable groups, compared to others, more seriously entertain such beliefs (Blanton, Christie, & Dye, 2002; Corrigan & Watson, 2002). For instance, an individual not diagnosed with depression until age 40 has had many years to learn, reinforce, endorse, and use the stereotypes that characterize those with depression (Corrigan, 1998, 2004; Corrigan & Watson, 2002). Upon diagnosis, he thus may be particularly likely to internalize

these stereotypes and worry that the negative stereotypes may apply to himself (Self-Concept Threat).

These examples reveal that members of different stigmatizable groups may experience different forms of stereotype threat. Note, however, that because members within certain groups may differ somewhat in the conditions outlined earlier, the mere knowledge of an individual's group membership alone does not allow us to confidently presume to know the threats to which he or she will be especially vulnerable. For instance, within many groups, individuals differ greatly in the extent to which they identify with the group—some may identify strongly with the group, whereas others may merely recognize that they can be categorized as a member of this group—and these two subgroups should be at risk for very different stereotype threats. Consider an overweight woman, for instance, who takes being overweight as an important, meaningful, social identity. She may belong to organizations principally open to overweight individuals, primarily associate with overweight individuals, and so on. As a result, she should be at risk for the group-relevant threats. Another similarly overweight woman, however, may view her weight merely as a medical problem and may not consider herself to belong to the group “overweight people.” This latter woman will be at risk for experiencing the self-relevant threats but not the group-relevant threats. Thus, although the two women share the same potentially stigmatizing mark, their experiences of stereotype threat may be quite different by virtue of their different social identities.

These few examples illustrate a strength of the Multi-Threat Framework: By assessing the extent to which the conditions that engage each of the different stereotype threats characterize a particular stigmatized group, one can derive focused predictions about the specific threats that members of these stigmatized groups are especially likely to experience.

Different Threats Should Be Moderated By Different Factors

To experience Self-Concept Threat, one must believe (among other things) that the negative stereotype could be valid. But just how valid need one believe it to be? We suggest here that a conceptualization involving the idea of a threshold will be useful, such that a certain minimum level of a variable (e.g., belief in the validity of the stereotype) must be exceeded before that variable facilitates the engagement of the particular threat. Even after such a threshold has been exceeded, however, there may still be a meaningful amount of room to move above that threshold, enabling the possibility for different situations and differences in individual propensities to further moderate the intensity of felt threat. Thus, an individual who has a weak, but above threshold, belief that the negative

stereotype could be true could experience some degree of Self-Concept Threat, but not as much as another individual who has a strong belief that the stereotype could be true. Thus, the variables articulated in Table 2 can be seen both as required conditions to engage the particular stereotype threats—by determining whether one exceeds a required threshold—and as moderator variables that influence how intensely the threat will eventually be experienced by those who do indeed exceed the threshold.

The experience of the various stereotype threats also should be moderated by other, more general, constructs that relate specifically to each of the threats. For example, self-as-target threats should be moderated to some extent by variables that more generally tie into the desire to be seen positively by oneself or others (e.g., self-esteem level and stability, need to belong; Crocker & Wolfe, 2001; Kernis, Paradise, Whitaker, Wheatman, & Goldman, 2000; Leary, Kelly, Cottrell, & Schreindorfer, 2006), whereas group-as-target threats should be moderated to some extent by variables that more generally tie into the desire for one's group to be seen positively (e.g., situations that activate collectivism, private or public regard for the group, private or public collective self esteem; Luhtanen & Crocker, 1992; Sellers, Rowley, Chavous, Shelton, & Smith, 1997). Other-as-source threats should be moderated by variables that more generally tie into the desire for public social approval (e.g., self-monitoring, public self-consciousness; Briggs, Cheek, & Buss, 1980; Gangestad & Snyder, 2000; Inzlicht, Aronson, Good, & McKay, 2006; Scheier & Carver, 1985), whereas self-as-source threats should tie into the desire for private approval (e.g., private self-consciousness; Briggs et al., 1980).

Different Threats Should Be Mediated By Different Factors

As mentioned earlier in this article, there is still some debate regarding the mechanisms through which the experience of stereotype threat leads to hindered test performance. Each stereotype threat has a similar potential to engage the recognized broad mechanisms and lead to performance decrements, such as general intrusive thoughts, arousal, anxiety, and so forth. However, the content or focus of many of these generally recognized mediators should differ as a function of the dimensions that characterize each of these threats.

For example, thought intrusion, including negative performance-relevant thoughts, appears to mediate stereotype threat effects (e.g., Cadinu et al., 2005; Stangor et al., 1998; Steele & Aronson, 1995). Thus, across all forms of stereotype threat there may be a general increase in performance-inhibiting thoughts. However, the content of these thoughts should differ across

the threats. For example, there should be an increase in group-based intrusive thoughts (e.g., "we," "us") in the group-as-target threats but an increase in self-based intrusive thoughts (e.g., "I," "me") in the self-as-target threats. Negative performance-relevant thoughts should follow a similar pattern. There should be an increase in group-based, performance-relevant thoughts (e.g., letting the group down) for the group-as-target threats but an increase in self-based, performance-relevant thoughts (e.g., ruining one's own opportunities, letting oneself down) for the self-as-target threats. The source of the threat also should influence the content of the aroused negative thoughts. Individuals experiencing the self-as-source threats may be distracted primarily by thoughts regarding performance ability, whereas individuals experiencing the other-as-source threats may be distracted primarily by thoughts related to rejection, impression management, or mistrust of the observing others.

As a second example, dejection appears to mediate the effects of the experience of manipulated stereotype threat (Keller & Dauenheimer, 2003) and may indeed do so for all six threats. It seems plausible, however, that other emotional reactions, differentially elicited by the different threats, also may play a mediating role. For instance, anticipatory shame and guilt—two social emotions—may arise when experiencing Group-Reputation Threat (Outgroup), Own-Reputation Threat (Ingroup), and Group-Reputation Threat (Ingroup) because in each of these cases one has the potential to let down ingroup members; anticipatory anger may arise when experiencing Own-Reputation Threat (Outgroup) because this is the emotion experienced when one perceives oneself to have been treated unfairly.

This brief discussion suggests that the qualitatively distinct stereotype threats may be mediated by somewhat different processes. If true, this would allow one to generate focused interventions to more effectively reduce the negative implications of stereotype threat.

Different Coping and Compensatory Strategies in Response to Different Stereotype Threats

There has been relatively little explicit exploration of the coping and compensatory strategies individuals spontaneously employ in response to the experience of stereotype threat. Steele and Aronson (1995) observed in their studies that stereotype-threatened African American students were especially likely to avoid describing themselves in stereotypic ways, were less willing to identify their race on a demographic questionnaire, were more likely to claim fewer hours of sleep the night before, and were more likely to suggest that standardized tests tend to be unfair and tricky.

Other research has shown that stereotype-threatened individuals may psychologically disengage their self-worth from the stereotyped domain (Stone et al., 1999) or engage in behaviors that allow for external attributions to poor performance. For example, stereotype-threatened individuals can be prone to self-handicapping—to placing disruptive obstacles in the way of their own performance—and to making after-the-fact excuses for their performances (e.g., Keller, 2002; Stone, 2002). Moreover, the experience of stereotype threat may lead individuals to disidentify with certain characteristics of their group (e.g., Pronin, Steele, & Ross, 2004) or of the situation (Major & Schmader, 1998; Nussbaum & Steele, in press) or reduce their aspirations and desires to pursue stereotype-relevant careers (Davies et al., 2002, 2005).

In this section, we nominate a variety of strategies that individuals may employ to cope with or compensate for the six core stereotype threats. Some of these strategies are straightforwardly derived from the conditions required to elicit the different forms of stereotype threat, discussed earlier (see Table 2). Other strategies have been drawn from related literatures (e.g., on coping with stigma; Crocker et al., 1998; Major et al., 1998; Major & O'Brien, 2005; Major, Quinton, & McCoy, 2002; Major & Schmader, 1998; Miller & Kaiser, 2001; Schmader, Major, & Gramzow, 2001), from the extant stereotype threat literature (as discussed in the previous paragraph), and from recent studies designed to test approaches for mitigating stereotype threat by imposing on individuals various coping strategies (we further discuss such studies below). A close consideration of the diversity of such cognitive and behavioral strategies, and a recognition that these strategies logically serve somewhat different functions, suggests that different strategies are likely to be employed (and to be differentially successful) in response to the six core threats (see Table 3).

Strategies Focused on the Source(s) of Stereotype Threat. The self-as-source threats focus on one's own views of the self (Self-Concept Threat) and of one's group (Group Concept Threat) and thus require coping strategies aimed at preserving a positive self-view or group view. Indeed, there is a substantial literature on such strategies (e.g., self-handicapping, the discounting of feedback, excuse generation, devaluing the domain, affirming in another domain), although it has not been well integrated into the stereotype threat literature (e.g., Crocker et al., 1998; Crocker & Major, 1989; Major et al., 2002; Major, Quinton, & Schmader, 2003).

The other-as-source threats focus on ingroup and outgroup others' views of the self or of the group and thus should require public remediation strategies (e.g., publicly self-handicapping, publicly discounting feedback, public

excuse generation). This does not mean, of course, that individuals experiencing self-as-source threats (Self-Concept Threat or Group-Concept Threat) should never employ public strategies; after all, public actions also can serve to alter the self-concept (Baumeister, 1998; Fazio, Effrein, & Falender, 1981; Tice, 1992). Nonetheless, there is a risk of taking certain strategies public. For example, whereas privately generating excuses for a poor performance may confront relatively few counterarguments from oneself, publicly doing the same may elicit challenges or ridicule from others (e.g., Kaiser & Miller, 2001; Sechrist, Swim, & Stangor, 2004; Stangor, Swim, Van Allen, & Sechrist, 2002; Swim & Hyers, 1999). Thus, although publicly employed strategies may sometimes be effective at influencing one's own self-view, we suspect that the same strategies are generally more safely employed privately.

Strategies Focused on the Target(s) of Stereotype Threat. To cope with group-as-target threats, one might engage in strategies that reduce one's attachment to the group: By reducing the extent to which the group itself is related to the individual's self-worth—by, for example, disassociating, disengaging, or ultimately disidentifying with the group—one can reduce the discomfort one might otherwise anticipate prior to a stereotype-relevant performance. One also might cope by directly distancing oneself as a representative of the group (e.g., by pointing to other group members more suited for the role as representative, communicating compensatory information regarding own or other group members' successes).

For the self-as-target threats, one also might reject or otherwise distance oneself from the stereotyped group in an attempt to shed the possibility of being evaluated in terms of the group's stereotyped abilities. However, given that identification with the group does not contribute to the experience of self-as-target threats, individuals experiencing self-as-target threats also may engage the group, or pull themselves closer to the group, as a source of support (e.g., turning to the ingroup for social comparison purposes, solidarity, positive affirmation, and corroboration of suspicions that the evaluative situation may have been biased; Crocker & Major, 1989).

Strategies Focused on the Stereotype-Relevant Domain. One could address all six core stereotype threats by disconfirming the stereotype with one's actions—by successfully behaving in a salient, counterstereotypic manner. Of course, it is the very belief that one may not be able to do so that arouses the sense of the threat in the first place. Moreover, some individuals know they

TABLE 3: Private and Public Coping and Compensatory Strategies Likely Engaged by Each of the Proposed Stereotype Threats

	<i>Self- Concept</i>	<i>Group Concept</i>	<i>Own Reputation (Outgroup)</i>	<i>Group Reputation (Outgroup)</i>	<i>Own Reputation (Ingroup)</i>	<i>Group Reputation (Ingroup)</i>
Strategies Engaged in Private						
Attempt to provide counterstereotypic evidence	X	X				
Domain avoidance	X	X				
Discount feedback in the domain	X	X				
Self-handicapping	X	X				
Spontaneous excuse generation	X	X				
Detach self-esteem (disengage) from domain	X					
Disidentify with domain	X					
Devalue importance of performance/domain for the self	X					
Self-affirm using another domain	X					
Engage the group for support	X		X			
Distance oneself from or reject the group	X	X		X	X	X
Devalue the importance of the group to the self	X	X		X	X	X
Detach self-esteem (disengage) from group		X		X	X	X
Disidentify with group		X		X	X	X
Devalue importance of performance/domain for the group		X		X		
Disengage as representative of group		X		X		X
Identify another as a representative of group		X				X
Strategies Engaged in Public						
Identify another domain in which to represent the group		X				
Attempt to provide counterstereotypic evidence	X	X	X	X	X	X
Domain avoidance	X	X	X	X	X	X
Discount feedback in the domain	X	X	X	X	X	X
Self-handicapping	X	X	X	X	X	X
Spontaneous excuse generation	X	X	X	X	X	X
Devalue importance of performance/domain for the self	X					
Self-affirm using another domain	X		X		X	
Distance oneself from or reject the group	X	X	X	X	X	X
Devalue the importance of the group to the self	X		X			
Devalue importance of performance/domain for the group		X		X		X
Disengage as representative of group		X		X		X
Identify another as a representative of group		X		X		X
Identify another domain in which to represent the group		X		X		X

do not have the capacity to behave in a counterstereotypic way (e.g., some women—similar to some men—are just not very good at math).

Alternatively, one could avoid the stereotyped domain altogether (thereby not placing oneself in a position to confirm the negative stereotypes), although that, too, is not always possible and may carry with it substantial costs. For example, in a society in which academic achievement is a gateway to long-term economic well-being, to drop out of school prematurely to reduce one's experience with stereotype threat will be problematic.

Instead, one might target the importance of the domain to buffer oneself from the proposed threats (e.g., Crocker et al., 1998; Major et al., 1998; Major & Schmader, 1998; Nussbaum & Steele, in press). For example, one might discount the importance of the domain, disidentify with the domain, generate excuses for poor performance in the domain, or self-affirm with another domain. As detailed above, these strategies are likely to be tailored toward the source and target of the

threat in a way predicted by our framework. For the group-as-target threats, these domain-diminishing strategies are likely to focus on the importance or value of the domain *for the group* (i.e., “Women have so many other important skills that being good at math just isn’t all that important”); for the self-as-target threats, such strategies are likely to focus on the importance or value for the self (i.e., “Why do I need to be great at math anyway? Being good in business really requires people skills”). When employed privately, these strategies can potentially protect only one's personal self-concept or group concept; when employed publicly, these strategies also may help protect the reputation of the self or the group.

Thus, this brief analysis of coping and compensation strategies, too, suggests the value of differentiating among the various stereotype threats. It is true that to combat each of the core threats, individuals could employ a general strategy of marshalling extra effort to provide counterstereotypic behavioral evidence, although this often will not be possible. It is also true that there is no

perfect one-to-one strategy-threat relationship because most strategies can be used to address more than one threat and each threat can potentially be addressed by more than one strategy. Overall, however, as the patterns in Table 3 reveal, different stereotype threats require different coping and compensation strategies.

There are important implications of this for understanding how—and how effectively—members of different stigmatized groups are likely to cope with, and compensate for, the threats they experience. We discussed earlier that different stigmatized groups might experience different stereotype threats (or combinations of stereotype threats). We should expect them, then, to employ somewhat different coping and compensation strategies. For example, for individuals who strongly identify with a negatively stereotyped group, privately affirming these groups in nonstereotyped domains may be a useful strategy for reducing Group-Concept Threat; this affirmation strategy, however, will be of little use for those who do not identify with their group (and who thus do not experience Group-Concept Threat) or who experience the other-as-source threats. As a second example, for individuals with difficult-to-conceal group memberships (e.g., African Americans, women), and who are thus susceptible to Own-Reputation (Outgroup) and Group-Reputation (Outgroup) Threats, public strategies are important. However, public strategies are less useful for those with readily concealed stigmas because they are less likely to experience other-as-source threats. Many such hypotheses can be straightforwardly derived from the Multi-Threat Framework.

EVIDENCE (INDIRECTLY) SUPPORTING THE MULTI-THREAT FRAMEWORK

At this point, there is no evidence directly testing our framework. Experimental conditions traditionally employed to elicit stereotype threat do not manipulate explicitly any of the six forms of stereotype threat to the exclusion of the others. There are no scales or other measures, of which we are aware, designed to assess in a differentiating manner the experience of the six stereotype threats. And, as reviewed above, there has been little attention paid to the many and varied ways in which individuals may cope with and compensate for stereotype threat, which we predict will differ by form of stereotype threat. Of course, in the absence of a conceptualization that explicitly considers qualitatively distinct stereotype threats, one would not expect researchers to employ such design features.

Nonetheless, some existing research does speak, albeit indirectly, to our ideas. Our foundational claim is that there exist distinct forms of stereotype threat; certain

packages of studies, considered in aggregate, are consistent with this claim. Consider, for example, the study by Inzlicht and Ben-Zeev (2003) on highly math-identified women: These women exhibited performance decrements on a difficult math exam even when they believed their performances would remain entirely private. This finding suggests the presence of (at least one of) the two self-as-source threats—Self-Concept Threat or Group-Concept Threat—but not the other-as-source threats.²

Other studies, however, reveal stereotype-relevant performance decrements for individuals who do not even belong to the salient negatively stereotyped group (e.g., individuals who are mentally healthy but believe observers think they are mentally ill, heterosexual men who believe others might think they are gay; Bosson et al., 2004; Farina et al., 1968); such individuals are unlikely to experience Self-Concept Threat and Group-Concept Threat but may very well experience Own-Reputation Threat (Outgroup).

Similarly, as mentioned earlier, some research suggests that individuals must identify with the stereotyped domain—that is, feel the domain is important to one's sense of self—to experience stereotype threat (e.g., Aronson et al., 1999; Steele et al., 2002). Yet, other research observes stereotype threat effects among individuals highly unlikely to identify with a particular negatively stereotyped domain, such as homosexuals in the domain of preschool care (Bosson et al., 2004) and men in the domain of emotional sensitivity (Leyens et al., 2000; Marx & Stapel, 2006). If these individuals do not identify with the stereotyped domain, why do they feel threatened by a stereotype-consistent performance? These individuals are unlikely to experience the self-as-source threats but may experience an other-as-source threat—the threat of being seen and judged through the lens of a negative stereotype (Own-Reputation Threat [Outgroup]).

Together, these sets of empirical findings suggest the presence of both self-as-source and other-as-source threats and suggest that they can be experienced independently of one another. Such a pattern of results is consistent with our contention that there exist multiple, independent forms of stereotype threat.

As another example, some research suggests that belonging to, and identifying with, one's groups is important for the emergence of stereotype threat effects (e.g., Bergeron et al., 2006; Marx et al., 2005; Schmader, 2002). For example, Schmader (2002) demonstrated that when group relevance was high for stereotype-threatened women, women who were highly identified with their gender underperformed on a math test in comparison to women who were less identified with their gender. Similarly, Bergeron and colleagues (2006) found that women underperformed in comparison to men on masculine sex-role-typed tasks and that these

effects were moderated by gender role identification. Such findings implicate the presence of a group-as-target threat—most likely Group-Reputation Threat (Outgroup). However, stereotype threat effects have been found in individuals unlikely to ever have identified with the potentially stigmatizing condition—individuals with mental illnesses (Quinn, Kahng, & Crocker, 2004), individuals of low SES (Croizet & Claire, 1998), and as mentioned above, individuals who are mentally healthy but have been led to believe that observers think they suffer from a mental disorder (Farina et al., 1968). These latter findings implicate the presence of a self-as-target threat—most likely Own-Reputation Threat (Outgroup). As above, these sets of studies imply the presence of both self- and group-targeted threats.

Furthermore, in contrast to studies that suggest that identifying with one's group increases one's risk for stereotype threat and negative academic consequences (e.g., Bergeron et al., 2006; Marx et al., 2005; Schmader, 2002), other researchers have found that identifying with one's group acts to buffer one against harmful academic consequences (e.g., Oyserman, Harrison, & Bybee, 2001; Oyserman, Kimmelmeier, Fryberg, Brosh, & Hart-Johnson, 2003). These apparently incompatible findings may result from the differential relevance of group identification to the different stereotype threats. Specifically, enhanced group identification may increase the experience of group-as-target threats (e.g., Group-Reputation Threat [Outgroup], as in the Schmader study) and buffer individuals from the self-as-target threats (e.g., Self-Concept Threat, as in the studies by Oyserman and her colleagues). Such a pattern would, again, suggest the existence of multiple, independent forms of stereotype threat.

At first glance, many of the above findings appear incompatible, even contradictory: People need to identify with their group to experience stereotype threat but do not actually need to belong to the group to experience stereotype threat. People need to identify with the domain to experience stereotype threat but may actually experience stereotype threat in domains that they do not care about. People's group membership needs to be visible to others to experience stereotype threat, but they also may experience stereotype threat when their identity is effectively concealed. Such findings become much less surprising, however—and, indeed, expected—upon recognizing that the conditions that elicit one core threat differ from those that elicit other core threats. Identifying with one's group may indeed be necessary for the experience of group-as-target and group-as-source threats but may be unnecessary for the experience of those threats not involving the group as a target or source; being publicly identifiable may indeed be necessary for the experience of other-as-source threats but may be unnecessary for the experience of self-as-source threats, and so on.

In sum, although the hypotheses inherent to the Multi-Threat Framework have yet to receive direct empirical attention, a reasonable amount of existing research is consistent with the framework's more general propositions. In particular, the notion that there exist multiple, qualitatively distinct stereotype threats finds indirect support from a pattern of findings that reveal inconsistencies in the conditions under which stereotype-relevant phenomena occur and in the circumstances that moderate these phenomena. Note, however, that because these intriguing inconsistencies appear when looking across studies—meaning that they depend on the presence of significant findings in some studies and nonsignificant findings in others—we must remain tentative in our conclusions: Such cross-study patterns may indeed represent true effects, but they also may result from less interesting factors such as differences in power and the stochastic nature of empirical effects.

IMPLICATIONS FOR INTERVENTION

The intellectual excitement surrounding the stereotype threat concept and research program stems in large part from the possibility that the real-world costs of stereotype threat are substantial. Might the experience of stereotype threat, researchers and policy makers ask, partially account for reduced academic achievement among African American students, for the relatively small proportion of women in math- and science-based careers, and the like? If so, and if one could design effective interventions for reducing the experience of stereotype threat, then one would have a powerful tool for influencing an important set of societal problems.

It is not surprising, then, that recent years have seen a surge in studies designed to test alternative means of combating the experience of stereotype threat (e.g., Ambady, Paik, Steele, Owen-Smith, & Mitchell, 2004; Aronson, Fried, & Good, 2002; Davies et al., 2005; Good, Aronson, & Inzlicht, 2003; Martens, Johns, Greenberg, & Schimel, 2006; Marx & Roman, 2002; McIntyre, Paulson, & Lord, 2003). We do not review this literature here but merely make several points about the implications of the proposed framework for designing effective interventions and evaluate, in an illustrative manner, several extant interventional approaches.

Most important, the Multi-Threat Framework suggests that the different stereotype threats will require qualitatively different interventions: An intervention that effectively mitigates Self-Concept Threat, for example, is unlikely to effectively mitigate Own-Reputation Threat (Outgroup) because these threats are elicited by different circumstances. Indeed, a quick return to Table 2, in which we outline the sets of conditions that elicit the

threats of current focus, suggests the absence of a simple “silver bullet”: No single condition (or set of conditions) contributes to the experience of all six threats. For example, personally identifying with the negatively stereotyped domain (e.g., wanting to do well in math) is a necessary contributor only to the experience of Self-Concept Threat. Two straightforward lessons emerge from this analysis: First, to the extent that one can identify the specific form of stereotype threat experienced by individuals or groups of individuals, one can tailor the intervention to target the most relevant eliciting circumstances; indeed, one must do so to be effective. Second, to the extent that one desires to combat several forms of stereotype threat with a single intervention, the intervention will need to be multipronged: Several specific sets of conditions will need to be altered.

The proposed Multi-Threat Framework thus suggests the need for interventionists to be sensitive to the distinctions among alternative stereotype threats. It also suggests, however, that the interventions themselves need not be highly complex because the conditions hypothesized to elicit each threat are seen to be necessary for their experience. Thus, one may need to eliminate only a single relevant condition to eliminate a particular stereotype threat. For instance, if one can convince an individual that those evaluating her math performance will never know her identity, our analyses suggest that she will not experience Own-Reputation Threat (Outgroup); that is, even if the other conditions for eliciting this threat are present—she knows that others know her to be a woman, she knows that others believe that women lack mathematical talent, and she cares deeply that others not see her perform poorly in math—she will nonetheless not experience the threat if she is convinced that her identity cannot be linked to her performance. This is not to say that she will not exhibit one of the other forms of stereotype threat—she very well might because the intervention suggested above is irrelevant to most of the other threats. It is also not to say that effectively eliminating a necessary condition is easy. This analysis does reveal, however, that effective interventions may be, in a conceptual sense, relatively simple.

One also can employ the Multi-Threat Framework to assess the range of applicability of extant intervention strategies. As one example, consider strategies that emphasize to potential stereotype-threatened individuals that the domain they are about to encounter is not one in which the targeted group performs less well than others perform or is indeed one in which the group or salient members of the group perform quite well (e.g., Davies et al., 2005; Marx & Roman, 2002; McIntyre et al., 2003). Although such strategies might be quite effective at reducing Self-Concept Threat—by reducing the likelihood that available stereotypes are seen as true

or legitimate by those potentially threatened by them—there is no reason to believe they would have any ameliorating effect on the own-reputation threats unless the targeted individuals also are led to believe that *observers* of their performance also see the stereotypes as illegitimate. An analysis of many extant intervention strategies suggests a similar conclusion: Most strategies are likely to be limited in the forms of stereotype threat to which they apply.

Not only are specific intervention strategies likely to be limited to certain forms of stereotype threat but some might even backfire when used to remediate other stereotype threats, instead facilitating the consequences they were originally designed to prevent. For example, interventions that provide individuals with descriptions of successful ingroup members (e.g., Marx & Roman, 2002; McIntyre et al., 2003) appear to remedy particular group-as-target stereotype threats. Marx and colleagues (2005) suggest, though, that such group-level intervention strategies will be successful *only* when the collective self is activated in stereotype threat situations because these intervention effects are mediated by impression management concerns—exposure to successful group members alleviates one’s own burden to successfully represent the group. Indeed, these researchers find performance *decrements* in these intervention conditions when the collective self is not activated—a circumstance likely characteristic of individuals particularly susceptible to the self-as-target threats. As another example, interventions that suggest to individuals that intelligence is malleable and that hard work can help reduce the effects of negative stereotypes (Aronson et al., 2002; Good et al., 2003) may be extremely successful in undermining Self-Concept or Group-Concept Threat because such information targets an individual’s perceptions of his or her own abilities and the legitimacy of the stereotype. However, such interventions may backfire for group-as-target threats because they may greatly heighten one’s felt responsibility to positively represent the group and to act in stereotype-inconsistent ways. Our point here is that intervention strategies that may successfully remedy the impact of some of the proposed stereotype threats may actually increase the experience of other stereotype threats.

Moreover, just because an intervention influences one class of outcomes (e.g., task performance) does not mean it will influence others (e.g., coping strategy). Consider an intervention designed to mitigate performance deficits by having targeted individuals attribute their anxiety to stereotype threat, as in the following instruction: “This anxiety could be the result of these negative stereotypes that are widely known in society and have nothing to do with your actual ability to do well on the test” (Johns, Schmader, & Martens, 2005, p. 176). This was an

effective (and elegantly simple) intervention for its purpose: It eliminated a stereotype threat–elicited performance decrement among women taking a difficult math exam. One might wonder, however, whether the same communication—because it further emphasizes the existence of such negative stereotypes—would as effectively alter some of the more maladaptive coping and compensatory strategies people employ to mitigate the psychological burden of stereotype threat as that threat accumulates. For example, although this intervention may have reduced the women’s concerns that the negative stereotypes actually apply to them (i.e., reduced Self-Concept Threat), its emphasis on the breadth of these stereotypes throughout society may have enhanced their sense that they would be discriminated against in the future (i.e., increased Own-Reputation Threat [Outgroup]). One consequence of this could be a decision to disengage preemptively from math-relevant settings to avoid such discrimination.

Our point here is not to criticize existing attempts to remediate stereotype threat; indeed, a number of extant strategies show great promise. Rather, we merely wish to suggest the usefulness of a multithreat perspective both for refining existing interventions and for generating new ones. Simply put, the strategies likely to be most effective will be those designed to combat (a) the particular stereotype threat(s) of interest and (b) the particular outcomes of interest.

FUTURE DIRECTIONS

The Multi-Threat Framework not only suggests potentially important theoretical refinements but also suggests the benefits to be gained by particular methodological refinements. First, the field needs to develop measures able to differentiate, reliably and validly, the experience of the alternative threats. In addition, it will be important to create manipulations able to engage each form of stereotype threat independent of the others; the conditions proposed to elicit the different stereotype threats, articulated in Table 2, should be extremely useful in this regard. Finally, the field needs to move beyond academic task performance as the gold standard outcome variable used to infer the presence of stereotype threat. Because such performances do not differentiate the alternative forms of stereotype threat and are less relevant to groups for which stereotypes are not academically centered, focusing on them hinders the development of stereotype threat theory. In contrast, turning research attention to the threat-differentiating ways in which individuals cope with, and compensate for, the presence of salient negative stereotypes holds the promise of greatly advancing the theory.

Research has focused, to this point, on members of ethnic minority groups and women as targets—groups

that may quite readily experience each of the six core stereotype threats (and potentially at the same time). However, many other individuals—for example, those with concealable stigmas or those with conspicuous stigmas that do not generate high levels of group identification—are likely to experience only a subset of these threats. Studying such individuals is important not only so we can better understand how stereotype threats apply to them and thereby be in a more informed position to mitigate their negative consequences but also because the experiences of such individuals provide useful information for developing a more textured theoretical conceptualization of stereotype threat.

We have proposed a set of six qualitatively distinct stereotype threats, determined by the intersection of two dimensions—the target of the threat (the self or one’s group) and the source of the threat (the self, ingroup others, or outgroup others)—and have suggested that other forms of stereotype threat can be derived from them. Indeed, we believe that a consideration of the core threats and the conditions that elicit them (see Table 2) will serve a useful foundation for identifying heretofore uncharacterized threats and for understanding how changing conditions in personal and social environments may elicit novel threats. The analysis we have provided also should be useful in understanding the implications—for coping and compensation, and for effective intervention—of even those threats not yet characterized.

In closing, we have seen that stereotype threat often means quite different things to different researchers and has been employed to describe and explain processes and phenomena that appear to be fundamentally distinct. Complementing existing models, we have proposed a Multi-Threat Framework in which six qualitatively distinct threats comprise the core of the broader stereotype threat construct and provide the foundation for additional forms of stereotype threat. We have argued that differentiating among these more specific threats is critical because they likely are elicited by different conditions, differentially characterize the experiences of members of different negatively stereotyped groups, are mediated by somewhat different mechanisms, are moderated by different personal and situational factors, are coped with and compensated for in different ways, and require different interventions to overcome. If one hopes to effectively minimize the costs of negative stereotypes for individuals, groups, and societies, one must intervene with an understanding of these important qualitative distinctions.

NOTES

1. This concern with being personally devalued by outgroup members appears to be the prototype concern driving early conceptualizations of stereotype threat (e.g., the “threat of being judged and

treated poorly in settings where a negative stereotype about one's group applies"; Steele, Spencer, & Aronson, 2002, p. 385). Indeed, some have suggested that this concern is both necessary and sufficient to experience the implications of stereotype threat and that all other possible concerns—including some of those proposed here—merely have the capacity to enhance the experience of Own-Reputation Threat (Outgroup) and its effects. Our analysis strongly suggests otherwise and argues instead that none of the six threats is necessary and that all are, alone, sufficient to generate a stereotype threat experience and its effects. Of course, this is an (untested) empirical question and we hope that the ideas presented here will make it easier to articulate and explore competing hypotheses.

2. One might argue that the participants in this study believed, researchers' claims aside, that someone at some time might view their exam results. If true, one may reinterpret these findings as revealing that the participants were experiencing not self-as-source threats but rather an own-reputation threat. This is, of course, possible and may be a favored interpretation of those who would view stereotype threat as fundamentally about the target's own reputation. One must be careful when positing this particular reinterpretation in the absence of evidence, however, because it is a large step toward the claim that targets may always hold, in the recesses of their minds, an understanding that someone may at some point have access to their actions. Such a position creates an impossible hurdle to clear for those exploring self-as-source threats and de facto defines away the possibility of the self-as-source threats as independent forms of stereotype threat.

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