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Abstract

Two studies demonstrated that different negatively stereotyped groups are at risk for distinct forms of stereotype threats. The Multi-Threat Framework articulates six distinct stereotype threats and the unique constellations of variables (e.g., group identification, stereotype endorsement) that elicit each stereotype threat. Previous research suggests that different negatively stereotyped groups systematically vary across these stereotype threat elicitors; a pilot study confirms these differences. Across two studies, groups that tend to elicit low stereotype endorsement (religion, race/ethnicity, congenital blindness) were less likely to report experiencing self-as-source stereotype threats (stereotype threats requiring stereotype endorsement) and groups that tend to elicit low group identification (mental illness, obesity, blindness later in life) were less likely to report experiencing group-as-target stereotype threats (stereotype threats requiring group identification). This research suggests that traditional models may overlook the experiences of stereotype threats within some groups and that interventions tailored to address differences between stereotype threats will be most effective.

Keywords

stereotype threat, stigma, Multi-Threat Framework, stereotypes

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Stereotype threat—a concern that one's actions can be seen through the lens of a negative stereotype (see Schmader, Johns, & Forbes, 2008; Shapiro & Neuberg, 2007; Steele, Spencer, & Aronson, 2002)—yields many negative consequences, including underperformance in stereotype-relevant domains (e.g., underperformance for women in math or science and racial/ethnic minorities in academics; Schmader & Johns, 2003; Steele & Aronson, 1995), reduced interest in stereotype-relevant careers (Davies, Spencer, Quinn, & Gerhardtstein, 2002), reduced self-efficacy (Aronson & Inzlicht, 2004), and negative health consequences (e.g., Blascovich, Spencer, Quinn, & Steele, 2001). In the past, stereotype threat has generally been conceptualized as a singular construct. However, recent research highlights the variability in conceptualizations of stereotype threat, revealing stereotype threat is often used to describe and explain distinct processes and phenomena (Shapiro, in press; Shapiro & Neuberg, 2007). To address this variability, Shapiro and Neuberg (2007) proposed a Multi-Threat Framework consisting of multiple, qualitatively distinct forms of stereotype threats.

One implication of multiple stereotype threats is that different negatively stereotyped groups may be differentially at risk for these stereotype threats. Understanding risk for, and experience of, the stereotype threats across groups is both

theoretically and pragmatically important. Theoretically, this will provide evidence for the different forms of stereotype threats and their eliciting factors. Furthermore, this will strengthen the generalizability of the stereotype threat phenomenon. That is, if one believes stereotype threat is a singular construct, it is logical to presume findings from previous research will easily generalize to different groups, domains, and situations. However, if there are multiple forms of stereotype threats experienced to varying degrees by different groups, stereotype threat paradigms from previous research may yield null findings in unique contexts or with novel groups, not because there is no risk for stereotype threat but because there is low risk for that *one* particular stereotype threat in that *one* particular context. This suggests that researchers and practitioners may (incorrectly and unintentionally) conclude the absence of stereotype threat and subsequently overlook the need for intervention. Thus, a consequence of failing to differentiate between stereotype

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Table 1. The Stereotype Threats That Make Up the Multi-Threat Framework: Six Core Stereotype Threats That Emerge Out of the Intersection of Two Dimensions: the Source of the Stereotype Threat and the Target of the Stereotype Threat

Source of the stereotype threat	Target of the stereotype threat		
	Self	Self	Group
	Self	Self-Concept Threat	Group-Concept Threat
	Other—outgroup member	Own-Reputation Threat (Outgroup)	Group-Reputation Threat (Outgroup)
	Other—ingroup member	Own-Reputation Threat (Ingroup)	Group-Reputation Threat (Ingroup)

threats is the potential to overlook stereotype-threatening situations or administer ineffective (or even harmful) interventions. Pragmatically, these findings will highlight the importance of considering the range of possible stereotype threats and the nuances of each stereotype threat for the development and translation of stereotype threat–reducing interventions.

Multi-Threat Framework

The Multi-Threat Framework (Shapiro & Neuberg, 2007) outlines six qualitatively distinct stereotype threats that emerge from the intersection of two dimensions—the target of the stereotype threat (whom one’s actions will reflect upon: the self or group) and the source of the stereotype threat (who can judge these actions: the self, outgroup others, or ingroup others). This results in six unique stereotype threats (see Table 1), described in more detail below. The Multi-Threat Framework also articulates the distinct constellations of variables necessary to elicit each stereotype threat. In the present research we focus on two of these elicitors—group identification (i.e., seeing a stigmatizable characteristic as central to one’s self-concept) and stereotype endorsement (i.e., believing there could be some truth to the negative stereotype). We focus on these elicitors for two reasons. First, previous research identifies these factors as systematically varying between negatively stereotyped groups (e.g., Crocker & Major, 1989; Goffman, 1963; Jones et al., 1984). Second, the stereotype threat literature has focused on these variables as potential stereotype threat moderators. For example, some research suggests group identification (e.g., Marx, Stapel, & Muller, 2005; Schmader, 2002) and stereotyped endorsement (e.g., Kiefer & Sekaquaptewa, 2007; Schmader, Johns, & Barquissau, 2004) may be important for the emergence of stereotype threat. However, other research suggests these variables should be irrelevant to the emergence of stereotype threat (e.g., Quinn, Kahng, & Crocker, 2004; Steele, 1999). In contrast to previous conceptualizations, the Multi-Threat Framework argues group identification and stereotype endorsement are differentially important to the emergence of each of the stereotype threats. As each stereotype threat is described in more detail below, we focus specifically on the relevance of group identification and stereotype endorsement to each of these stereotype threats.

Self-Concept Threat is a self-as-source, self-as-target stereotype threat. Self-Concept Threat is conceptualized as the fear of stereotypic characterization in “one’s own eyes”—the fear of seeing oneself as possessing the negative stereotypic trait. For example, James, a Black male, might fear that a poor performance on an academic exam will support the hypothesis lurking within the recesses of his own mind that he is, by virtue of his race, less intelligent than his White classmates.

To experience Self-Concept Threat, one must (among other factors) believe the negative stereotype could be true (stereotype endorsement). That is, if James believes there is no credibility to the negative stereotype, there would be no reason for him to fear he might actually possess this negative trait. However, group identification should not be necessary for Self-Concept Threat to emerge. It is important to note that just recognizing that one belongs to a group or that others can label one as belonging to a group is not the same as psychologically “identifying” with that group. For example, consider an obese woman who fears she may in fact possess the negative characteristics stereotypically associated with obesity (e.g., laziness). This woman can experience Self-Concept Threat even if she does not personally identify as being an “overweight person” or care about the implications of her behavior for how overweight people in general are viewed. Thus, as long as James knows he can be classified as belonging to a particular group, he can fear seeing himself as actually possessing the negative stereotypic trait.

Group-Concept Threat is a self-as-source, group-as-target stereotype threat. 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 in one’s own mind that the group to which one belongs to is legitimately devalued. Thus, James might fear that an inadequate performance on an academic exam will confirm in his own mind the stereotype that Black students are less intelligent than White students.

To experience Group-Concept Threat one must identify with one’s group. If James does not identify with being Black (i.e., being Black is not central to James’s self-concept), he is unlikely to care about the implications of his own actions for how he views the group as a whole. In addition, similar to Self-Concept Threat, one needs to believe the stereotype could be true (again, if he sees no credibility to the stereotype, he would not fear his actions could make the stereotype true in his own mind).

Own-Reputation Threat (Outgroup, Ingroup) is an other-as-source, self-as-target stereotype threat. Own-Reputation Threat (Outgroup, Ingroup) is the fear of stereotypic characterization in the eyes of others. For example, James may fear a poor performance would enable an employer, teacher, or friend to see him as stereotypic and thereby treat him in an unfavorable manner. For Own-Reputation Threat (Outgroup), the evaluative other is an outgroup member (e.g., a White evaluator, in James's case), and for Own-Reputation Threat (Ingroup) the evaluative other is an ingroup member (e.g., a Black evaluator, in James's case).

In contrast to Self-Concept Threat, Own-Reputation Threat (Outgroup, Ingroup) requires James to believe evaluative *others* endorse the negative stereotypes and can identify him as a member of the stereotyped group. That is, one cannot confirm a negative stereotype in the minds of others if these others do not hold the stereotype as a reasonable hypothesis. Furthermore, one must care about the implications of being seen as stereotypic by this evaluative other; if James does not care how others see him in the stereotyped domain, he should not fear their evaluation. Because life outcomes are often determined by majority group members, most individuals tend to care about being seen positively by outgroup majority individuals, facilitating the emergence of Own-Reputation Threat (Outgroup). Because the focus of Own-Reputation Threat (Outgroup) is on how outgroup others evaluate the self, group identification should be irrelevant: James does not need to identify with being Black to worry that outgroup others can apply negative stereotypes to him and his actions.

Risk for Own-Reputation Threat (Ingroup) should increase with group identification, as a greater investment in the group increases the importance of, and value placed on, being seen positively by ingroup members, in addition to increasing the costs and consequences associated with being evaluated negatively by ingroup members. For example, being judged negatively or rejected by someone who shares an unimportant group membership has very little consequence—there should be few, if any, implications for one's life outcomes. Consider an overweight man who is also a racial minority. If this man's weight is not a central, important identity, there are very few consequences of being seen as stereotypic by an overweight observer or a community of overweight individuals. Thus, he is unlikely to be concerned about this possibility. In contrast, if his race is an important, central identity and a person from this valued ingroup sees him as stereotypic, there are likely negative consequences for his status within this group, his social relationships, and other life outcomes. As a result, he is likely to care about whether his actions are seen as stereotypic by another member of this valued ingroup. Thus, although individuals are likely to see majority group members—an outgroup—as important, salient evaluative others holding power over one's life outcomes, only those individuals invested in the ingroup (high group identification) are also likely to see ingroup

members as important, salient evaluative others who hold power over their life outcomes.

Finally, *Group-Reputation Threat (Outgroup, Ingroup)* is an other-as-source, group-as-target stereotype threat. Group-Reputation Threat (Outgroup, Ingroup) is the fear of reinforcing negative stereotypes about one's group in the minds of outgroup or ingroup 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 another's mind, the negative stereotypes about Black students' intellectual ability.

Thus, to experience Group-Reputation Threat (Outgroup, Ingroup), one must believe that others think the stereotype could be true—one cannot confirm a negative stereotype in the minds of others if these others do not hold the stereotype as a reasonable hypothesis. In addition, for both forms of Group-Reputation Threat to emerge, one must identify with the group. If James does not identify with his race, he is unlikely to care about the implications of his actions for how others will view his race.

Because the Multi-Threat Framework articulates variables necessary for the emergence of each stereotype threat, the foregoing analysis focuses on the absence of particular variables as a way in which to predict risk for stereotype threats. Predicting risk from the presence of a particular variable is more difficult because a constellation of factors is required for each of the stereotype threats to emerge. As a result, the presence of any one of those factors does not guarantee risk for any one stereotype threat. For example, for the self-as-source stereotype threats to emerge, stereotype endorsement, or believing the stereotypes could be true, is necessary. That is, if Michelle does not believe she is worse at math because she is a woman, then she should not fear that her math performance could confirm in her own mind that she is, or women as a whole are, stereotypic (Self-Concept Threat and Group-Concept Threat, respectively). This is not true for the remaining stereotype threats: Regardless of her own stereotype endorsement, Michelle can still fear that *others* hold these stereotypes and will use her performance to draw conclusions about her own, or women's, abilities (Own-Reputation Threat and Group-Reputation Threat, respectively). Thus, to the extent someone does *not* believe the stereotypes could be true, there should be reduced risk for self-as-source stereotype threats.

As another example, for group-as-target stereotype threats to emerge, group identification is necessary. For example, if Michelle does not strongly identify with her gender, she is unlikely to care about the ramifications of her performance for how she or others perceive women (Group-Concept Threat and Group-Reputation Threat [Outgroup, Ingroup], respectively). However, group identification should be irrelevant for Self-Concept Threat and Own-Reputation Threat (Outgroup): Regardless of whether Michelle sees being a woman as central to her self-concept, she can still fear that because she is a woman, a poor performance on a math test

can confirm she is stereotypic, in her own mind or in the minds of outgroup others, respectively. Thus, to the extent that one does *not* identify with the group, there should be reduced risk for group-as-target stereotype threats.

Variability in Group Identification and Stereotype Endorsement Between Groups

Group identification and stereotype endorsement (characteristics that elicit risk for some of the stereotype threats) tend to vary systematically between some negatively stereotyped groups.¹ For example, previous research suggests that compared to groups based on race or religion, group identification is relatively rare among individuals who are obese or have a mental illness (A. B. Cohen, 2009; Corrigan, 2004; Crocker & Major, 1989; Sellers, Smith, Shelton, Rowley, & Chavous, 1998). In contrast, compared to groups based on mental illness or weight, individuals considering groups based on race or religion are less likely to believe that the negative stereotypes associated with these groups are true (Corrigan & Watson, 2002; Crandall & Biernat, 1990; Quinn & Crocker, 1999; Teachman, Wilson, & Komarovskaya, 2006).²

One dimension of stigma that likely contributes to differences in group identification and stereotype endorsement is whether a stigmatizing characteristic emerged later in one's life or dates from early in one's childhood (Crocker & Major, 1989; Jones et al., 1984). For example, characteristics such as weight and mental illness often emerge later in life. Indeed, some mental illnesses show no symptoms prior to 18 years of age, are triggered by stressful events more likely to occur later in life, and so on. In contrast, group memberships based on race (and often religion) are usually known from an early age (due to skin color, family practices, early socialization). Research finds that children are able to correctly label their own and others' race by age six (e.g., Aboud, 1988; Madge, 1976) and are aware of many racial stereotypes by age 4 or 5 (e.g., Aboud, 1988). Furthermore, children understand the implications of these stereotypes for interracial interaction and status. For example, by the age of 6, Black children report that Whites stereotype Blacks as inferior (McKown & Weinstein, 2003) and associate novel jobs performed by Black targets as lower paying and requiring less education compared to identical jobs performed by White targets (Bigler, Averhart, & Liben, 2003).

Thus, there is some systematic variability between groups regarding when individuals come to learn about the stigmatizable characteristic and associated stereotypes. Having information about a stigmatizable characteristic early in one's developmental trajectory, as is often the case with race/ethnicity or religion, can influence group identification because this affords knowledge of these identities as one develops his or her self-concept, increasing the likelihood

that this group will be integrated into, and is seen as central to, one's self-concept (e.g., Akiba, Szalacha, & Garcia Coll, 2004; A. B. Cohen, 2009; Turner & Brown, 2007).³ However, learning of, or acquiring, a stigmatizable characteristic later in life, as is often the case with mental illnesses or weight, often means considering these identities after one has established or solidified one's self-concept, increasing the likelihood that these identities will be seen as peripheral to one's self-concept.

In addition, when stigmas are acquired later in life, this leaves many years to learn and endorse stereotypes associated with these characteristics and to devalue these groups *before* they become personally relevant (e.g., Link, Cullen, Struening, Shrout, & Dohrenwend, 1989), creating a greater likelihood of stereotype endorsement or internalization. In contrast, when stigma acquisition is early in life, one's understanding of the self and the stereotype can be developed in tandem. This allows one to engage in, and benefit from, self-protective strategies (e.g., attributing negative feedback to prejudice, selectively comparing one's outcomes to others with the same stigmatizable characteristic, selectively valuing and devaluing attributes on which one's group does well or poorly; Crocker & Major, 1989) that limit internalizing or endorsing the negative stereotypes. Thus, learning about a stigmatizable characteristic earlier compared to later in life—a time line that systemically varies between some stigmatizable groups—can contribute to differences in both group identification and stereotype endorsement or internalization (Crocker & Major, 1989; Jones et al., 1984).

Another factor likely contributing to differences in group identification and stereotype endorsement between groups is the extent to which these characteristics are shared, embraced, or celebrated by close others such as family and friends (e.g., Brewin, MacCarthy, Duda, & Vaughn, 1991; Corrigan, 2004; Crandall, 1995). For example, one's family and friends often share and celebrate racial/ethnic group and religious group memberships, which likely strengthens group identification. This also likely contributes to considering oneself in a "group" with others who share this stigmatizable characteristic (e.g., Lickel et al., 2000), a factor that facilitates group identification. Furthermore, family members tend not to see one's shared racial or religious group as negative or threatening (Crocker & Major, 1989), likely reducing stereotype endorsement. In addition, sharing an identity with close others provides opportunities to see members of one's group engaging in counterstereotypic behaviors, which should also reduce the likelihood of stereotype endorsement.

Some stigmatizable characteristics do not manifest a community orientation. Consider mental illnesses or obesity—these identities tend not to be embraced or celebrated by family and friends. Even though there are genetic components to both of these characteristics, close others who possess them often try to hide or mask them, which may weaken the likelihood of group identification. Indeed, individuals are

found to stigmatize family members who are overweight or have a mental illness (e.g., Chandra & Minkovitz, 2007; Crandall, 1991; Moses, 2010). Furthermore, the limited access to similar others reduces opportunities to see counter-stereotypic behaviors. These features likely contribute to increased stereotype endorsement.

A third factor likely contributing to differences in group identification and stereotype endorsement between groups is the extent to which one's stigmatizable characteristic is seen as controllable (e.g., Weiner, Perry, & Magnusson, 1988). That is, characteristics such as obesity and mental illness are often seen as controllable or personally remediable (e.g., Weiner et al., 1988). Furthermore, both overweight and average-weight individuals tend to see people as responsible for their weight (Quinn & Crocker, 1999), and individuals with mental illnesses are just as likely, if not more likely, than the general public to report that individuals with mental illnesses are responsible for their condition (Rusch, Corrigan, Todd, & Bodenhausen, 2010). In addition, individuals with these particular stigmatizable characteristics often report that stereotypes and prejudices are legitimate (Corrigan & Watson, 2002; Rusch, Todd, Bodenhausen, Olschewski, & Corrigan, 2010), likely stemming from beliefs that they could change their status on this characteristic if they wanted to put forth the effort. Thus, seeing one's stigmatizable characteristic as controllable likely contributes to stereotype endorsement. In addition, these beliefs are also likely to contribute to group identification: If one sees a stigmatizable characteristic as controllable, this suggests it is transient, or can be changed at any point, hindering the development of a strong sense of an ingroup.

Different Groups at Risk for Different Stereotype Threats

As described earlier, group identification is important for the emergence of group-as-target and ingroup-as-source stereotype threats, and stereotype endorsement is important for the emergence of self-as-source stereotype threats. Thus, if particular stigmatizable characteristics facilitate lower levels of stereotype endorsement or group identification, individuals with these characteristics should be less likely to experience the related stereotype threats. Thus, we anticipated that individuals with negatively stereotyped group memberships that tend not to elicit stereotype endorsement (e.g., race/ethnicity, religion) would be less likely to experience self-as-source stereotype threats compared to other-as-source stereotype threats. In contrast, we anticipated that individuals with negatively stereotyped group memberships that tend not to elicit group identification (e.g., mental illness, being overweight) would be less likely to experience group-as-target and ingroup-as-source stereotype threats compared to self-as-target stereotype threats. The present research explores these hypotheses. First, a pilot study explored differences in group

identification and stereotype endorsement for groups based on race, religion, mental illness, or being overweight. Next, Study 1 explored the variability in stereotype threat experiences between these groups. And finally, Study 2 explored variability across these stereotype threats within a single group—people who are blind.

Pilot Study

The aim of this study was to verify differences suggested by previous research between groups in stereotype endorsement and group identification. Participants indicating in a mass-testing questionnaire that they possessed either a stigmatizable race/ethnicity ($n = 41$), religion ($n = 65$), mental illness ($n = 25$), or weight ($n = 17$) were recruited in exchange for partial course credit. Participants were asked to consider their negatively stereotyped characteristic (e.g., race) and then insert it into a blank ("□") in each question. *Group identification* was measured with three modified items from the Multidimensional Inventory of Black Identity (Sellers et al., 1998; e.g., "Being/having □ is an important part of my self-image," $\alpha = .79$). To measure *stereotype endorsement*, participants generated a negative stereotype others have about their group and completed two items regarding this stereotype (e.g., "I believe this stereotype is true of me," $\alpha = .86$). A 7-point Likert-type scale (1 = *strongly disagree*, 7 = *strongly agree*) was used for all items.

Group identification and stereotype endorsement varied between groups in the predicted manner (see Figure 1). An analysis of variance (ANOVA) with group type (race/ethnicity, religion, mental health, and weight) as a between-participants variable and group identification as the dependent variable revealed a significant effect of group type, $F(3, 144) = 19.51$, $p < .001$, $\eta_p^2 = .29$. As expected, planned contrasts (2 [race/ethnicity, religion] vs. 2 [mental health, weight]) revealed that participants considering their race/ethnicity or religion reported greater group identification compared to participants considering being overweight or having a mental illness, $F(1, 144) = 50.79$, $p < .001$, $\eta_p^2 = .28$.⁴ An ANOVA with group type as a between-participants variable and stereotype endorsement as the dependent variable also revealed a significant effect of group type, $F(3, 143) = 8.51$, $p < .001$, $\eta_p^2 = .15$.⁵ As expected, a planned contrast analysis (2 [race/ethnicity, religion] vs. 2 [mental health, weight]) revealed that participants considering their race/ethnicity or religion reported less stereotype endorsement compared to participants considering being overweight or having a mental illness, $F(1, 143) = 25.39$, $p < .001$, $\eta_p^2 = .15$.

Study 1

Consistent with extant research, the pilot study demonstrated that (a) individuals considering their race/ethnicity or religion were less likely than those considering their mental illness or

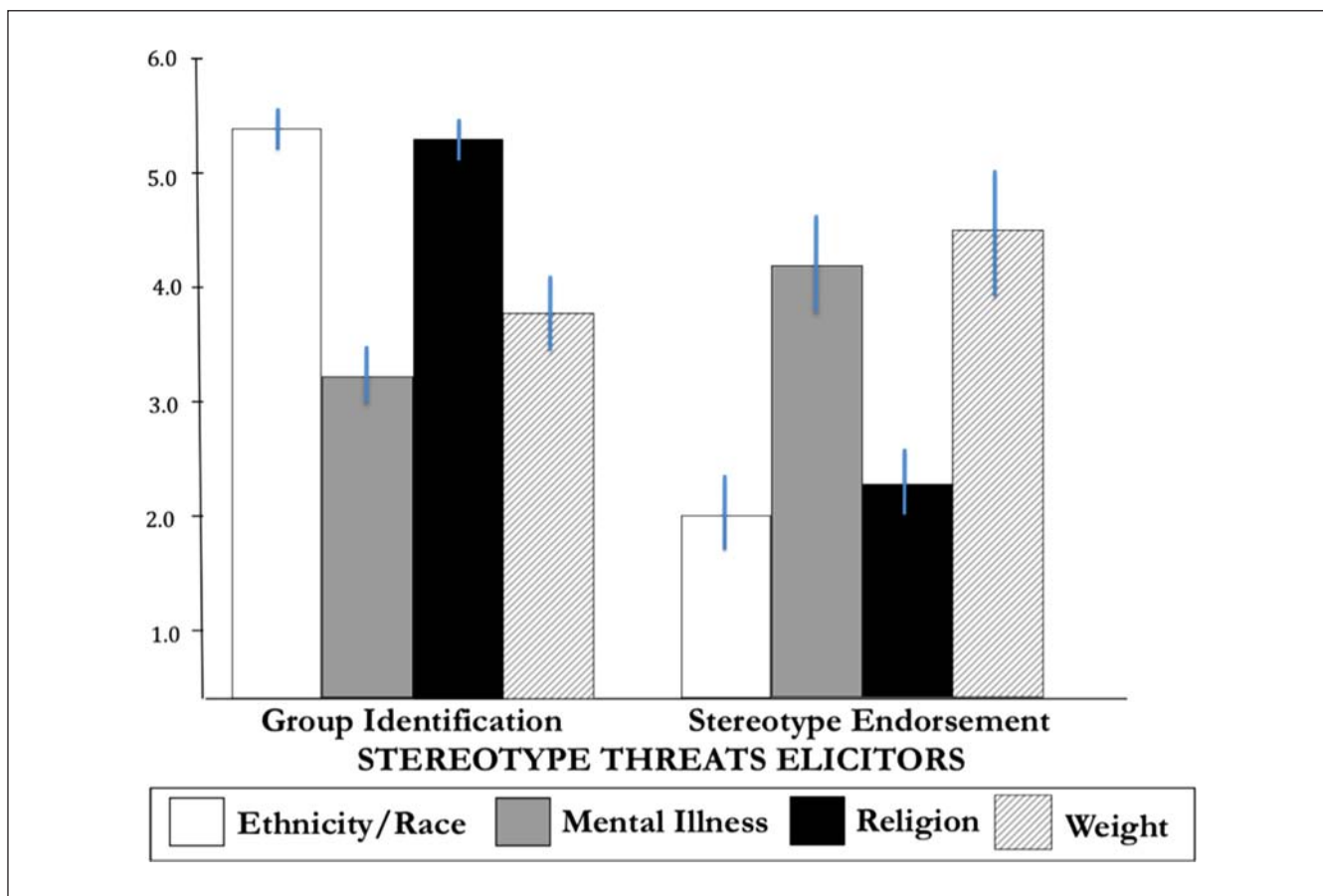


Figure 1. Mean levels of group identification and stereotype endorsement within participants considering their race, mental illness, religion, or weight (Pilot study)
Error bars represent standard errors.

weight to report endorsing the stereotypes associated with these groups and (b) individuals considering their mental illness or weight reported identifying with these groups less strongly than those considering their race/ethnicity or religion. We anticipated that this variability between groups on group identification and stereotype endorsement—factors that are differentially necessary to elicit some of the stereotype threats—would change risk between groups for the stereotype threats.

For Study 1 we recruited participants from all four groups—individuals stigmatized as a function of their mental health, being overweight, race/ethnicity, and religion—and asked them to consider a stereotype others hold about their group. With this stereotype in mind, participants considered situations in which their actions could confirm the stereotype and responded to questions regarding their experience of Self-Concept Threat, Group-Concept Threat, Own-Reputation Threat, and Group-Reputation Threat in these situations.⁶ This procedure allowed for different groups, stereotyped in different domains, to complete the same task.

We expected to find systematic variability between groups in their experiences of the stereotype threats. We predicted that participants belonging to low stereotype-endorsing

groups (race/ethnicity, religion) would report lower levels of self-as-source stereotype threats—the stereotype threats that require stereotype endorsement—compared to other-as-source stereotype threats. We expected a different pattern of stereotype threats for low identifying groups (mental illness, being overweight): Lower levels of group-as-target stereotype threats—stereotype threats that require group identification—compared to self-as-target stereotype threats. Thus, overall, we anticipated a significant interaction between type of negatively stereotyped group (low stereotype-endorsing groups/low identifying groups) and the experience of the different stereotype threats, as this would suggest that different types of groups are at risk for different types of stereotype threats.

To examine the specific pattern of stereotype threats predicted to emerge among each group type, we used contrast analyses. Given that group identification is an important factor for the emergence of group-as-target stereotype threats, we anticipated finding support for a 2 (group-as-target stereotype threats [Group-Concept Threat, Group-Reputation Threat]) versus 2 (self-as-target stereotype threats [Self-Concept Threat, Own-Reputation Threat]) contrast analysis among the low identifying groups (mental illness, being

Table 2. Measure of Stereotype Threats Used in Study 1

Item
Self-Concept Threat
1. ... to what extent are you concerned that your actions will lead you to see yourself as actually possessing the negative stereotype that others have about people who are/have []?
2. ... to what extent are you concerned that your actions could imply negative things about your abilities in your own mind?
3. ... to what extent are you concerned that your actions could confirm, in your own mind, that the negative stereotypes others have about people who are/have [] are true of you?
Group-Concept Threat
1. ... to what extent are you concerned that your actions will confirm, in your own mind, that the negative stereotypes are true about people who are/have []?
2. ... to what extent are you concerned that your actions will prove to yourself that the stereotypes are true about people who are are/have []?
3. ... to what extent are you concerned that your actions will lead you to believe that the stereotypes about people who are/have [] are true?
Own-Reputation Threat
1. ... to what extent are you concerned that because you are/have [], your actions could influence the way other people interact with you?
2. ... to what extent are you concerned that your actions could lead you to be judged negatively by others because you are/have []?
3. ... to what extent are you concerned that your actions could lead others to judge you based on the stereotypes about people who are/have []?
Group-Reputation Threat
1. ... to what extent are you concerned that your actions will reinforce the negative stereotypes, to others, about people who are/have []?
2. ... to what extent are you concerned that your actions might poorly represent people who are/have []?
3. ... to what extent are you concerned that your actions might confirm the negative stereotypes in the minds of others about people who are/have []?

For each question, participants were asked to generate a situation in which their actions have the potential to confirm the negative stereotype. Each question started with, "Please think about your actions in these types of situations. When you are in these types of situations. . . ."

overweight) such that lower group-as-target stereotype threats would be reported compared to self-as-target stereotype threats. In contrast, because stereotype endorsement is important for the self-as-source stereotype threats, we anticipated finding support for a 2 (self-as-source stereotype threats [Self-Concept Threat, Group-Concept Threat]) versus 2 (other-as-source stereotype threats [Own-Reputation Threat, Group-Reputation Threat]) contrast analysis among the low stereotype-endorsing groups (race/ethnicity, religion) such that lower self-as-source stereotype threats would be reported compared to other-as-source stereotype threats.

Across both sets of predictions outlined above, there is one stereotype threat expected to emerge for all participants, regardless of group: Own-Reputation Threat. This is in part because Own-Reputation Threat does not require stereotype endorsement or group identification. Indeed, it requires very little to emerge. That is, Own-Reputation Threat requires that one believe others might endorse the negative stereotypes, a boundary condition met by all participants in the present study given the methodology (all identify and consider a negative stereotype others hold).

Method

On a mass-testing questionnaire, participants completed a demographics section containing potentially stigmatizable

group memberships including race/ethnicity, religion, mental illness, and weight. Participants reporting any of these stigmatizable characteristics were emailed a link to the online questionnaire.

Participants. Participants received course credit or a raffle ticket for completing the questionnaire online. Participants possessed one of the following stigmatizable characteristics: race/ethnicity ($n = 68$), mental illness ($n = 73$), religion ($n = 63$), and being overweight ($n = 34$).

Measures and procedures. Stereotype threats—Self-Concept Threat ($\alpha = .92$), Group-Concept Threat ($\alpha = .85$), Own-Reputation Threat ($\alpha = .88$), and Group-Reputation Threat ($\alpha = .79$)—were measured with three items each (see Table 2 for stereotype threat items and Table 3 for correlations between stereotype threats). In the focal questionnaire, participants were asked to identify one characteristic they possessed that is negatively stereotyped. To measure the stereotype threats, participants identified a negative stereotype others associate with their group and that has had an influence on their life. Some examples given by participants included unintelligent, alcoholic (race); irrational, want attention (mental illness); judgmental, terrorist (religion); and lazy, no control (overweight). Next, participants generated a situation in which their behaviors can confirm this stereotype (i.e., a situation with risk for stereotype threat). Some examples given by participants included academic tests or

Table 3. Correlations Among Stereotype Threats in Study 1

	1	2	3	4
Self-Concept Threat	—			
Own-Reputation Threat	.64	—		
Group-Concept Threat	.74	.57	—	
Group-Reputation Threat	.61	.64	.68	—

All correlations are significant at $p < .01$.

class debates (re: intelligence, rational thinking), parties or attending bible study (re: judgmental), being at the airport (re: terrorist), restaurants or parties with food (re: no control), and social situations (re: lazy/irrational). The survey software inserted this group, stereotype, and stereotyped situation into all subsequent questions. Thus, each participant worked on a questionnaire tailored to his or her stigmatizable group membership.

Results

Before examining the focal predictions, we examined the more general claim regarding Own-Reputation Threat. Specifically, because Own-Reputation Threat requires that one believe others endorse the stereotypes (a boundary condition met by all participants), and does not require personal stereotype endorsement or group identification, we expected it would emerge across all participants. To examine this hypothesis, a 1 (Own-Reputation Threat) versus 3 (Self-Concept Threat, Group-Concept Threat, Group-Reputation Threat) planned contrast was conducted within each group (religion, race/ethnicity, overweight, mental illness). As predicted, these analyses revealed Own-Reputation Threat was significantly greater than the remaining three stereotype threats for each group (all $ps < .001$). Thus, for the subsequent analyses, we focus on the remaining three stereotype threats, as this is where we hypothesize variability between groups to emerge.

We anticipated two unique patterns of stereotype threats. First, we expected the experience of the stereotype threats would be similar among participants considering low stereotype-endorsing groups (race/ethnicity, religion). Second, we expected a similar pattern to emerge among participants considering low identifying groups (mental illness, being overweight). Two mixed-factors ANOVAs were conducted with stereotype threats (Self-Concept Threat, Group-Concept Threat, Group-Reputation Threat) as a within-participants variable, one with the low stereotype-endorsing groups (race/ethnicity, religion) as a between-participants variable and the other with the low identifying groups (mental health, weight) as a between-participants variable. These two tests revealed no interaction between stereotype threats and group type (all F s $< .10$). Thus, for the subsequent analyses, we consider two categories of groups: low stereotype-endorsing groups and low identifying groups.

A mixed-factors ANOVA with stereotype threats (Self-Concept Threat, Group-Concept Threat, Group-Reputation Threat) as a within-participants variable and the two types of stigmatizable groups (low stereotype-endorsing, low identifying groups) as a between-participants variable revealed a main effect of stereotype threats, $F(2, 449) = 5.42, p < .01, \eta_p^2 = .02$. Consistent with predictions, this was qualified by an interaction with group type, $F(2, 449) = 7.66, p < .001, \eta_p^2 = .03$, suggesting a different pattern of stereotype threats between the two types of groups (see Figure 2).

Low identifying groups: Mental health, weight. Among low identifying groups, a repeated measures ANOVA with the stereotype threats as a within-participants factor revealed a significant effect of stereotype threats, $F(2, 173) = 7.92, p = .001, \eta_p^2 = .07$. Specifically, given that individuals are less likely to psychologically identify with groups based on mental health or weight (a factor necessary for group-as-target stereotype threats), we anticipated lower levels of group-as-target stereotype threats (Group-Concept Threat, Group-Reputation Threat). Consistent with expectations, a 2 (Group-Concept Threat, Group-Reputation Threat) versus 1 (Self-Concept Threat) planned contrast revealed that participants belonging to low identifying groups were less likely to report group-as-target stereotype threats ($M = 4.06, SD = 2.06$) compared to Self-Concept Threat ($M = 4.59, SD = 2.24$), $F(1, 106) = 10.50, p = .002, \eta_p^2 = .09$.

Low stereotype-endorsing groups: Race/ethnicity, religion. Among low stereotype-endorsing groups, a repeated measures ANOVA with stereotype threats as a within-participants factor revealed a significant effect of stereotype threats, $F(2, 250) = 4.75, p = .01, \eta_p^2 = .04$. Specifically, given that individuals are less likely to endorse stereotypes associated with groups based on race/ethnicity or religion (a factor necessary for self-as-source stereotype threats), we expected lower self-as-source stereotype threats (Self-Concept Threat, Group-Concept Threat). As predicted, a 2 (Self-Concept Threat, Group-Concept Threat) versus 1 (Group-Reputation Threat) planned contrast revealed participants belonging to low stereotype-endorsing groups were less likely to report self-as-source stereotype threats ($M = 3.82, SD = 1.98$) compared to Group-Reputation Threat ($M = 4.13, SD = 1.80$), $F(1, 130) = 5.31, p = .02, \eta_p^2 = .04$.⁷

Discussion

Taken together, Study 1 revealed that different negatively stereotyped groups report experiencing unique patterns of stereotype threats. Participants considering their mental health or weight were less likely to report group-as-target stereotype threats compared to self-as-target stereotype threats. In contrast, participants considering their race/ethnicity or religion were less likely to report self-as-source stereotype threats compared to other-as-source stereotype threats. This pattern of data was expected as a function of the different characteristics, histories, and social experiences associated

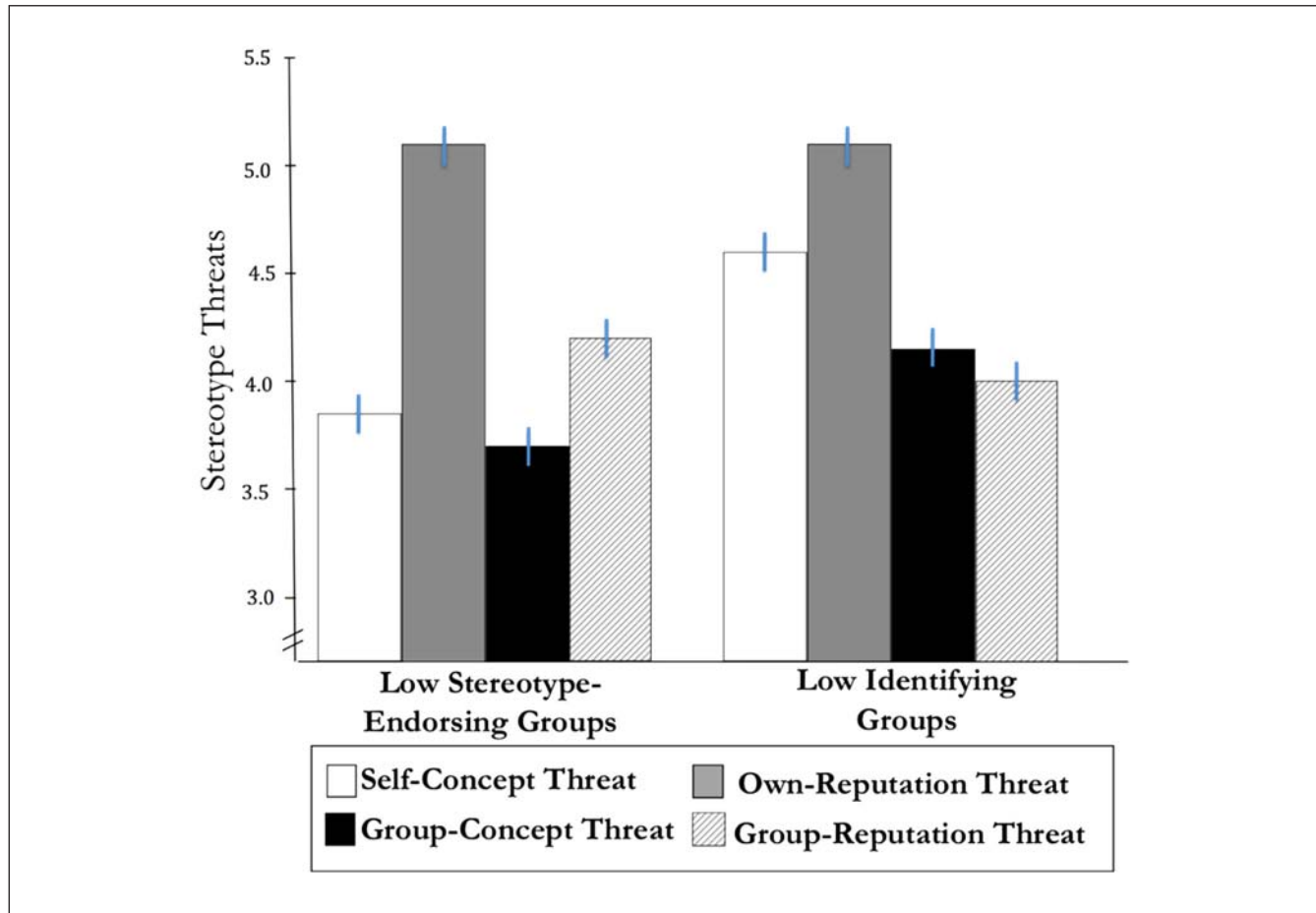


Figure 2. Reported experiences of the different stereotype threats by participants considering low stereotype-endorsing (race, religion) or low identifying (mental illness, weight) groups (Study 1). Error bars represent standard errors.

with different negatively stereotyped groups. That is, having a mental illness or being overweight tends to elicit low group identification, a characteristic essential for the experience of group-as-target stereotype threats (Group-Concept Threat, Group-Reputation Threat). In contrast, race/ethnicity and religion tend to elicit low stereotype endorsement, a characteristic essential for the experience of self-as-source stereotype threats (Self-Concept Threat, Group-Concept Threat). Thus, as anticipated, the systematic variability across groups on group identification and stereotype endorsement led to predictable patterns of reported stereotype threats.

Study 1 highlighted the variability in the experience of stereotype threats between groups. However, because this variability results from differential endorsement of factors such as group identification and stereotype endorsement (factors that are differentially relevant to the emergence of each stereotype threat), to the extent that there is variability across these factors within groups, there should be variability across the stereotype threats within groups as well. Study 2 addresses this question.

Study 2

Physical disabilities elicit a range of group identification and stereotype endorsement (e.g., Crocker & Major, 1989; Wright, 1983). Scholars argue this is because, unlike the groups explored in Study 1, physical disabilities tend to emerge across the life span (e.g., Crocker & Major, 1989; Wright, 1983). For example, a person can be born with a physical disability or acquire a physical disability later in life due to an illness or accident. As described earlier, time of stigma acquisition can shape stereotype endorsement and group identification. That is, someone born with a physical disability can develop his or her self-concept with knowledge of this physical disability, increasing the likelihood of integrating this identity into his or her self-concept (higher group identification). In addition, someone born with a physical disability learns the negative stereotypes after learning he or she possesses the physical disability, allowing this individual to understand the stereotypes with knowledge of how they can be applied to the self, affording access

to self-protective strategies buffering against stereotype endorsement or internalization (Crocker & Major, 1989). In addition, acquiring a physical disability early in life allows one to proceed through developmental milestones (e.g., school, work, friendship formation) with this disability and to learn to navigate life with this disability. As a result, this provides a history of evidence disproving stereotypes concerning helplessness or an inability to accomplish tasks independently, leading to a lower likelihood of endorsing or internalizing these negative stereotypes.

In contrast, for those who acquire a disability later in life, their self-concept is likely formed before the disability becomes a relevant categorization, reducing the likelihood of group identification. Furthermore, individuals who acquire disabilities later in life may learn, internalize, and/or endorse the negative stereotypes before the disability becomes a relevant self-categorization. In addition, for many who acquire a disability later in life, this requires relearning many behaviors (e.g., driving, navigating a city, using a computer) to accommodate the disability. Any difficulty relearning these tasks can be used as evidence for stereotypes regarding low ability and lack of independence. As a result of these experiences, individuals who acquire a disability later in life may be more likely to endorse or internalize the negative stereotypes. Thus, acquiring a disability early, compared to later, in life can shape stereotype endorsement and group identification, which should result in corresponding differences in the experience of the stereotype threats.

Ingroup Versus Outgroup Others as Potential Sources of Stereotype Threats

Although the methodology in Study 1 precluded an assessment of whether the outgroup or ingroup served as the source of the stereotype threats, Study 1 likely tapped participants' concerns pertaining to the outgroup, and specifically the majority group outgroup, as this is the group that tends to hold negative stereotypes and tends to wield the most power in terms of life outcomes. However, ingroup members can also be a source of stereotype threat. That is, an individual can be concerned an ingroup member will observe his or her actions and as a result judge him or her to be stereotypic (Own-Reputation Threat [Ingroup]) or infer from these actions that the negative stereotypes are true of the group as a whole (Group-Reputation Threat [Ingroup]). For Group-Reputation Threat (Ingroup), group identification is needed for the same reason it is needed for Group-Reputation Threat (Outgroup)—a person is unlikely to be concerned about poorly representing the ingroup if he or she does not see the group as a central identity. Unlike Own-Reputation Threat (Outgroup), group identification is also important for the emergence of Own-Reputation Threat (Ingroup). If an individual does not consider the negatively stereotyped condition an important or central identity, he or she is unlikely to

care about an evaluation or inference made by others who share this negatively stereotyped condition. In contrast, individuals who do consider the negatively stereotyped condition to be an important or central identity have a greater investment in and interdependence with this group and are therefore likely to see the ingroup as important, salient evaluative others who hold power over life outcomes.

Stereotype Threats Experienced by the Blind Community

In the present study, blind participants were recruited from listservs targeting blindness-related issues (e.g., National Federation of the Blind), and as a result attract individuals highly invested in blind culture (high group identification) and low in stereotype endorsement. Participants were asked to generate a stereotype they believe sighted others endorse regarding individuals who are blind. As a result, all participants considered a stereotype held by majority outgroup others—putting them at risk for outgroup-as-source stereotype threats.

In general, the stereotypes believed to be held by sighted others tend to concern a blind person's competence or capacity to independently accomplish tasks. Because the vast majority of individuals who are blind are in fact able to navigate their life independently (e.g., use computers with ease, find their way around a city or campus), this is not a stereotype that tends to be endorsed or internalized within the blind community (in particular those who subscribe to blindness-relevant listservs). Thus, across the whole sample we hypothesized that participants would report lower levels of self-as-source stereotype threats (Self-Concept Threat, Group-Concept Threat), the stereotype threats requiring stereotype endorsement. In addition, we did not anticipate finding evidence for the ingroup-as-source stereotype threats (Own-Reputation Threat [Ingroup], Group-Reputation Threat [Ingroup]) because participants likely do not believe that others within the blind community endorse the stereotypes (just as they personally do not). That is, to the extent ingroup members are not believed to hold the negative stereotypes, one is unlikely to be concerned about confirming this stereotype in their minds. Thus, we expected a significant 4 (Self-Concept Threat, Group-Concept Threat, Own-Reputation Threat [Ingroup], Group-Reputation Threat [Ingroup]) versus 2 (Own-Reputation Threat [Outgroup], Group-Reputation Threat [Outgroup]) specified contrast.

Variability as a Function of Stigma Onset

Although this particular sample likely is composed of individuals who are invested in the group, we hypothesized that if any participants acquired their disability later in life, we would see a pattern of stereotype threats different from the sample as a whole. Thus, we identified a subset of

participants based on whether it was clear they were blind since (or near) birth (e.g., premature birth, born without eyes) or likely became blind later in life due to a medical condition (e.g., cataracts, diabetes). We expected participants with congenital blindness would likely identify with the blind community and would be unlikely to endorse or internalize the negative stereotypes or believe that ingroup members (individuals who are blind) endorse the stereotypes. Thus, we anticipated they would report a pattern of stereotype threats similar to the pattern described for the sample as a whole. However, for participants who acquired their blindness later in life, we hypothesized a very different pattern. We anticipated lower levels of group identification and as a result reduced risk for group-as-target stereotype threats (Group-Concept Threat, Group-Reputation Threat [Outgroup]) and ingroup-as-source stereotype threats (Group-Reputation Threat [Ingroup], Own-Reputation Threat [Ingroup]). That is, participants who became blind later in life spent a large part of their life as sighted. As a result, sighted others were not only the ingroup but also the most salient relevant evaluative audience. Thus, even though participants can be categorized as part of the blind community, they are likely to be more integrated into, and dependent on, the sighted community. Thus, their relatively low identification and investment within the blind community should reduce the likelihood that the blind community would be seen as an important evaluative audience, reducing the likelihood of experiencing Own-Reputation Threat (Ingroup). Therefore, we expected a significant 4 (Group-Concept Threat, Group-Reputation Threat [Outgroup], Own-Reputation Threat [Ingroup], Group-Reputation Threat [Ingroup]) versus 2 (Self-Concept Threat, Own-Reputation Threat [Outgroup]) specified contrast within participants who became blind later in life.

Method

Participants. In exchange for a raffle ticket, 250 blind individuals (78% White, 44% female, $M_{\text{age}} = 37.44$, $SD_{\text{age}} = 13.11$) participated. For 98 participants the cause of blindness was clear; 79 reported blindness at (or near) birth, and 19 indicated their blindness was due to cataracts or diabetes.

Measures and procedure. The stereotype threat items differed from those used in Study 1 in two ways. First, given time constraints, each threat was measured with two items. Second, because the group was known prior to participation, other-as-source stereotype threats were framed in terms of sighted (outgroup) or blind (ingroup) individuals. Thus, six stereotype threats were measured (see Table 4 for correlations): Self-Concept Threat ($\alpha = .85$), Group-Concept Threat ($\alpha = .73$), Own-Reputation Threat (Outgroup; $\alpha = .73$), Group-Reputation Threat (Outgroup; $\alpha = .67$), Own-Reputation Threat (Ingroup; $\alpha = .86$), and Group-Reputation Threat (Ingroup; $\alpha = .87$). As in Study 1, these items were completed

Table 4. Correlations Among Stereotype Threats in Study 2

	1	2	3	4	5	6
Self-Concept Threat	—					
Group-Concept Threat	.75	—				
Own-Reputation Threat (Outgroup)	.60	.50	—			
Group-Reputation Threat (Outgroup)	.47	.36	.58	—		
Own-Reputation Threat (Ingroup)	.59	.55	.49	.50	—	
Group-Reputation Threat (Ingroup)	.59	.54	.53	.40	.62	—

All correlations are significant at $p < .01$.

in the context of an action that has the potential to confirm a negative stereotype sighted others hold of blind individuals.

Results

Entire sample. As expected, a repeated measures ANOVA with the six stereotype threats as a within-participants factor revealed a significant effect of stereotype threats, $F(4, 1096) = 85.31$, $p < .001$, $\eta_p^2 = .26$ (see Figure 3). Furthermore, the predicted pattern of stereotype threats emerged using a planned 4 (Self-Concept Threat, Group-Concept Threat, Own-Reputation Threat [Ingroup], Group-Reputation Threat [Ingroup]) versus 2 (Own-Reputation Threat [Outgroup], Group-Reputation Threat [Outgroup]) contrast, $F(1, 249) = 258.03$, $p < .001$, $\eta_p^2 = .51$. That is, the self-as-source stereotype threats (Self-Concept Threat, Group-Concept Threat) and the ingroup-as-source stereotype threats (Own-Reputation Threat [Ingroup], Group-Reputation Threat [Ingroup]; $M = 2.87$, $SD = 2.13$) were less likely to emerge than the outgroup-as-source stereotype threats (Own-Reputation Threat [Outgroup], Group-Reputation Threat [Outgroup]; $M = 4.53$, $SD = 2.30$). This pattern remained with Own-Reputation Threat (Outgroup) removed from the analyses: a 1 (Group-Reputation Threat [Outgroup]) versus 4 (Self-Concept Threat, Group-Concept Threat, Own-Reputation Threat [Ingroup], Group-Reputation Threat [Ingroup]) contrast was significant, $F(1, 249) = 126.24$, $p < .001$, $\eta_p^2 = .34$.

Variability as a function of stigma onset. Within the 98 participants for whom timing of stigma onset was clear, a mixed-factors ANOVA revealed a main effect of stereotype threats (within-participants variable), $F(4, 418) = 14.02$, $p < .001$, $\eta_p^2 = .13$, qualified by an interaction with cause of blindness (between-participants variable), $F(4, 418) = 2.76$, $p = .02$, $\eta_p^2 = .03$ (see Figure 4). As anticipated, for those participants who were likely low in stereotype endorsement (congenital blindness), the pattern of stereotype threats was similar to the sample as a whole: the 4 (Self-Concept Threat, Group-Concept Threat, Own-Reputation Threat [Ingroup], Group-Reputation Threat [Ingroup]) versus 2 (Own-Reputation Threat [Outgroup], Group-Reputation Threat [Outgroup]) contrast was significant, $F(1, 78) = 88.50$, $p < .001$, $\eta_p^2 = .53$. That is, participants reported lower levels of the self-as-source

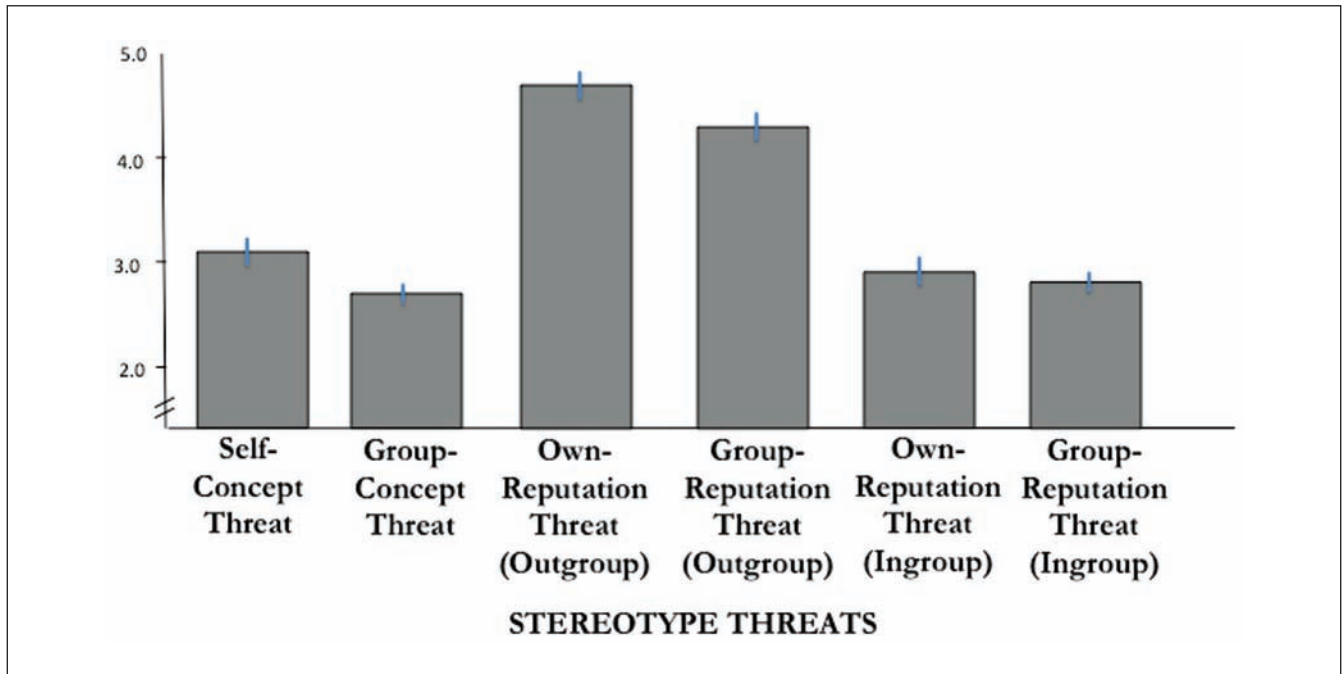


Figure 3. Reported experiences of the different stereotype threats by full sample of blind participants (Study 2) Error bars represent standard errors.

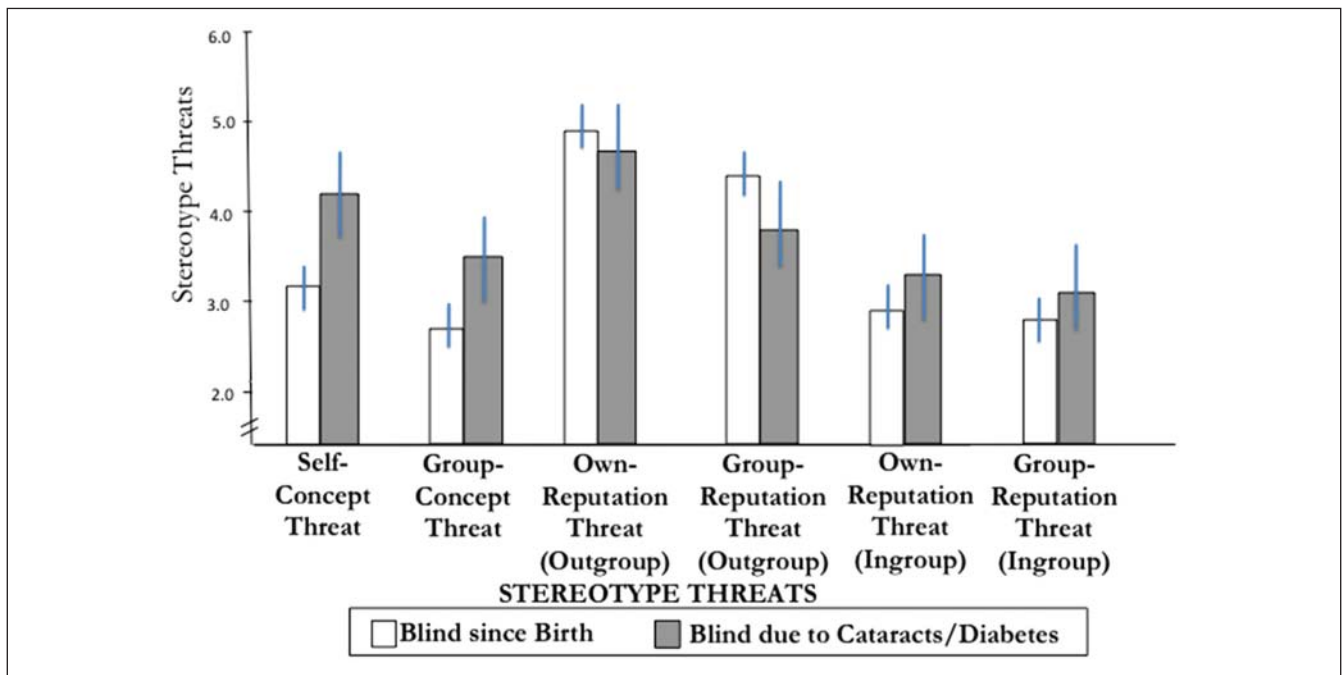


Figure 4. Reported experiences of the different stereotype threats by subset of blind participants as a function of the cause of their blindness (Study 2) Error bars represent standard errors.

and ingroup-as-source stereotype threats ($M = 2.89$, $SD = 2.10$) compared to the outgroup-as-source stereotype threats ($M = 4.66$, $SD = 2.31$). This pattern remained with Own-Reputation Threat (Outgroup) removed from the

analysis: the 1 (Group-Reputation Threat [Outgroup]) versus 4 (Self-Concept Threat, Group-Concept Threat, Own-Reputation Threat [Ingroup], Group-Reputation Threat [Ingroup]) contrast was significant, $F(1, 78) = 38.60$, $p < .001$, $\eta_p^2 = .33$.

For those participants who were likely low group identifiers (participants who became blind later in life), a different pattern emerged across the stereotype threats. As expected, the 4 (Group-Concept Threat, Group-Reputation Threat [Outgroup], Own-Reputation Threat [Ingroup], Group-Reputation Threat [Ingroup]) versus 2 (Self-Concept Threat, Own-Reputation Threat [Outgroup]) contrast was significant, $F(1, 18) = 11.09, p = .004, \eta_p^2 = .38$. That is, participants were less likely to report group-as-target (Group-Concept Threat, Group-Reputation Threat [Outgroup]) and ingroup-as-source (Own-Reputation Threat [Ingroup], Group-Reputation Threat [Ingroup]) stereotype threats ($M = 3.43, SD = 2.09$) compared to the remaining stereotype threats (Self-Concept Threat, Own-Reputation Threat [Outgroup]; $M = 4.43, SD = 2.49$). This pattern remained with Own-Reputation Threat (Outgroup) removed from the analysis: a 1 (Self-Concept Threat) versus 4 (Group-Concept Threat, Group-Reputation Threat [Outgroup], Own-Reputation Threat [Ingroup], Group-Reputation Threat [Ingroup]) contrast was significant, $F(1, 18) = 5.01, p = .04, \eta_p^2 = .22$.

Discussion

Although Study 1 examined the variability in stereotype threats between groups, Study 2 examined variability within a group: individuals who are blind. Many scholars note that a unique characteristic of physical disabilities is the tendency for group identification and stereotype endorsement to differentially manifest across individuals who have physical disabilities (e.g., Crocker & Major, 1989; Wright, 1983). Consistent with this variability, in the present study we hypothesized and found that the experience of stereotype threats varied in predictable ways across blind individuals. Among participants whose blindness was congenital, an aspect that should reduce stereotype endorsement or internalization, we hypothesized and found lower self-as-source and ingroup-as-source stereotype threats (stereotype threats that require stereotype endorsement and perceived ingroup stereotype endorsement, respectively) compared to the remaining stereotype threats. In contrast, for individuals whose blindness emerged later in life, an aspect that should reduce group identification, we hypothesized and found lower group-as-target and ingroup-as-source stereotype threats (stereotype threats that require group identification) compared to the remaining stereotype threats. Thus, Study 2 offered additional support for the existence of multiple stereotype threats and, consistent with Study 1's findings, provided support for the predictability of stereotype threats as a function of characteristics such as group identification and stereotype endorsement.

General Discussion

The present research provided initial evidence for different patterns of stereotype threats emerging between and within

negatively stereotyped groups in ways that are predictable from the Multi-Threat Framework. Studies 1 and 2 demonstrated that participants belonging to stigmatizable groups less likely to elicit stereotype endorsement—groups based on their race/ethnicity, religion, or congenital blindness—reported lower self-as-source stereotype threats (concerns that a performance could confirm in one's own mind that the stereotypes are true of oneself or the group, which require personal stereotype endorsement) compared to other-as-source stereotype threats (concerns that a performance could confirm in someone else's mind that the stereotypes are true of oneself or the group). In contrast, participants belonging to stigmatizable groups that tend not to elicit group identification—groups based on their mental health, weight, or blindness acquired later in life—reported lower group-as-target stereotype threats (concerns that a performance could confirm in one's own or someone else's mind that the stereotypes are true about the group, which require group identification) compared to self-as-target stereotype threats (concerns that a performance could confirm in one's own or someone else's mind that the stereotypes are true about the self).

Taken together, the findings from the present research offer evidence that both between and within negatively stereotyped groups, different yet predictable patterns of stereotype threats are likely to emerge. In the present set of studies we looked for differences as a function of stereotype endorsement and group identification. We chose to focus on these two factors because previous research suggests these factors (a) vary between and within certain negatively stereotyped groups and (b) may moderate stereotype threat effects. However, it is important to note that each of the stereotype threats is brought about as a function of many different factors, not just these two factors. As described in more detail below, as future research explores the range of eliciting factors and their reach, patterns of stereotype threats different from those explored in the present research should emerge between and within groups.

There are a number of important theoretical and pragmatic implications of these findings. Theoretically, this is the first set of studies to empirically demonstrate variability in the experience of stereotype threats and provide support for the manifestation of these stereotype threats. To date, most research focuses on stereotype threat as a singular construct similarly experienced across situations, individuals, and groups. However, as the present data demonstrate, this is likely not the case. Instead, a range of stereotype threats may be lurking in stereotype-relevant tasks as a function of the potential source of the stereotype threat (the self, outgroup others, ingroup others) and the target of the stereotype threat (the self, the group). The present research also provides some preliminary support for the factors that elicit stereotype threats. Although we did not directly test the role of group identification and stereotype endorsement, the findings from the pilot study, Study 1, and Study 2 provide compelling evidence that group identification plays a key role in the

emergence of group-as-target stereotype threats, whereas stereotype endorsement plays a key role in the emergence of self-as-source stereotype threats. Future research will benefit from a more direct assessment of these hypotheses.

This is also the first set of studies to address differential risk for stereotype threats between groups. In general, stereotype threat research focuses primarily on racial minority groups and women, groups that tend to elicit relatively high levels of group identification and relatively low levels of stereotype endorsement. If stereotype threat is a singular construct, findings from studies assessing these groups, and any groups, should generalize to other negatively stereotyped groups. However, to the extent that different groups may be more or less likely to experience some of the stereotype threats, a focus on a subset of negatively stereotyped groups may inadvertently focus on a subset of stereotype threats. The present research suggests that groups less frequently (or rarely) studied may experience different stereotype threats than the more commonly studied groups. As one example, previous research argues that group identification is an important stereotype threat moderator (Marx et al., 2005; Schmader, 2002), suggesting that groups that do not elicit group identification (e.g., mental illness, obesity) may be immune to stereotype threat effects. Yet these findings are inconsistent with both previous research and the present research revealing that negative stereotypes regarding mental illness or weight do indeed elicit stereotype threat (Kiefer, Sekaquaptewa, & Barczyk, 2006; Quinn et al., 2004). Thus, many findings from previous research may pertain to a specific set of stereotype threats and will not generalize to all groups or across all situations.

Furthermore, to the extent that manipulations and measures are assumed to function similarly and are translated from one program of research to another, from one group to another, or even within a group between individuals who vary on the stereotype threat elicitors, these paradigms may produce null findings, not because these individuals are immune to stereotype threat effects but because they have a lower risk for the particular stereotype threat(s) activated in that context. In addition to the possibility that some groups might be overlooked with a singular conceptualization of stereotype threat, the conclusion that a particular group is immune to the negative effects of a phenomenon reduces the likelihood that interventions will be developed for these groups. Furthermore, if interventions built to address one form of stereotype threat are administered in the context of different stereotype threats, they may be ineffective or even harmful. Thus, the present research has implications for identifying stereotype threats in groups and individuals who may be overlooked by traditional conceptualizations of stereotype threat and provides evidence of the complexity of stereotype threat: Although some characteristics (i.e., group identification) may be necessary for some stereotype threats, it is not relevant to all stereotype threats.

By offering support for the Multi-Threat Framework and the contention that unique factors elicit each of the stereotype threats, the present research also has implications for the development of interventions. First, the present research points to distinct factors that elicit the stereotype threats, suggesting that no single intervention is likely to remediate all stereotype threats. Second, to the extent that one can identify the specific stereotype threat, one can tailor interventions to target the most relevant eliciting circumstances. Future research will benefit from continuing to distinguish between different stereotype threats and the constellations of conditions that elicit them, as this will facilitate the development of theoretically driven stereotype threat interventions.

Limitations and Future Directions

In the discussion above, we highlighted some avenues for future research, with a particular emphasis on a greater exploration of the different forms of stereotype threats, the different factors that elicit these stereotype threats, and the implications of multiple stereotype threats for intervention. Below we discuss limitations of the present research and additional avenues for future research.

One limitation of the present research is the tremendous variability in the data given the range of stereotypes and situations selected by participants. Future research will benefit from more focused explorations of stereotype threats. It is important to note, however, that even with the lack of homogeneity in our samples, we found support for our predictions, suggesting that more focused research will likely reveal even stronger effects.

A second limitation is the use of self-reported stereotype threats. Much of the existing stereotype threat literature focuses on performance (usually in academic domains). Nonetheless, previous research finds that individuals can identify their experience of stereotype threat on self-report measures, which maps onto negative behavioral implications, including decrements in performance (e.g., G. L. Cohen & Garcia, 2005; Goff, Steele, & Davies, 2008; Marx & Goff, 2005; Marx, Ko, & Friedman, 2009). Furthermore, using self-report measures in the present research was important, as this research is the first, to our knowledge, to explore the stereotype threats within the Multi-Threat Framework. The self-report methodology allowed us to assess the different concerns that emerge in stereotype-threatening situations (each of which should similarly lead to decrements in performance). Furthermore, the self-report methodology was important given that different groups are stereotyped in disparate domains, all with different performance measures. Thus, self-report allowed us to examine a range of groups stereotyped in very different domains. Future research will, however, benefit from experimentally manipulating each of the stereotype threats and utilizing a

variety of measures to assess the different stereotype threats. In addition, tests explicitly linking self-reported stereotype threats to actual behavior measures, such as performance, learning, health decisions, and the like, will be of great benefit to future research.

Although we limited the present investigation to five groups, we aimed to represent an array of stigmatizable groups in this first demonstration of variability in stereotype threats between (and within) groups. However, future research will benefit from studying more groups and studying these groups in a variety of contexts. That is, even though we show many similarities between groups, such as between race and religion or mental illness and weight, these characteristics are very different from each other in many other meaningful ways that can also have implications for the experience of stereotype threats. For example, although groups based on weight and mental illness showed a similar pattern of stereotype threats in the present investigation, they are differentially concealable—weight is conspicuous, yet mental illness can often be concealed. Concealability should influence the experience of the other- and self-as-source stereotype threats. That is, to the extent that others cannot identify the negatively stereotyped group, there is little reason to fear that others will see one's performance in terms of stereotypes associated with this group, reducing risk for other-as-source stereotype threats. In the present investigation, participants considered others' stereotypes and focused on situations in which their actions could confirm these stereotypes, reducing our ability to see variability in the experience of stereotype threats as a function of stigma concealability. Future research will benefit from exploring stereotype threats in many different contexts, including those in which individuals can conceal stigmatizable characteristics, as this should offer different insights into the experiences of stereotype threats.

Another limitation of the groups and contexts studied in the present research is an inability to explore in greater detail the ingroup-as-source stereotype threats. In the present research (Study 2), there was evidence that participants differentiated between ingroup- and outgroup-as-source stereotype threats; however, the ingroup-as-source stereotype threats were not as commonly experienced relative to other stereotype threats. We likely did not find evidence of ingroup-as-source stereotype threats within participants with congenital blindness because they were unlikely to believe that other blind individuals endorsed the negative stereotypes held by sighted others. In contrast, we likely did not find support for the ingroup-as-source stereotype threats within those who acquired blindness later in life because they were unlikely to identify with the blind community. Although ingroup-as-source stereotype threats did not emerge in the present research, there is evidence suggesting these forms of stereotype threats do in fact emerge in some contexts (e.g., G. L. Cohen & Garcia, 2005). Future research would greatly benefit from an exploration of these stereotype threats, the contexts

that facilitate them, and the factors that moderate and mediate them.

Conclusions

The present research tests a prediction made by the Multi-Threat Framework (Shapiro & Neuberg, 2007): Different negatively stereotyped groups may be at risk for experiencing different stereotype threats. To begin testing this hypothesis, the present research explored the experience of different stereotype threats across five different groups: race/ethnicity, religion, mental illness, people who are overweight, and people who are blind. Consistent with expectations, individuals belonging to these groups reported specific patterns of stereotype threats, patterns that varied in predictable ways both between and within groups. Specifically, participants considering group memberships less likely to elicit group identification (weight, mental health, recently acquired blindness) were less likely to report group-as-target stereotype threats compared to self-as-target stereotype threats. That is, stereotype threats were more likely to be rooted in how a performance would reflect on the self—in one's own eyes or in another's eyes—rather than on the group. In contrast, participants considering group memberships less likely to elicit stereotype endorsement (religion, race/ethnicity, congenital blindness) were less likely to report self-as-source stereotype threats compared to other-as-source stereotype threats. That is, stereotype threats were more likely to be rooted in how others would interpret a stereotype-relevant action—for one's own abilities or the group's abilities—rather than how one might personally interpret these actions. Through an appreciation of the distinct forms of stereotype threat, this research hopes to facilitate a more complete understanding of stereotype threat, how to identify risk for stereotype threats, and how to develop the strongest interventions to reduce the pernicious effects of stereotype threats for all groups contending with negative stereotypes.

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Notes

1. It is important to note these are general tendencies and there are many exceptions at the individual level.
2. Although this focuses between groups, these differences should emerge in similar ways within groups (detailed in Study 2).
3. Ethnic/racial minority children consider race/ethnicity to be more central to their self-concept than ethnic/racial majority children (Turner & Brown, 2007). Many believe that because ethnic/racial majority children live in a society in which their ethnicity is considered normative there is a lower likelihood of establishing themselves according to their ethnic identity (e.g., Aboud, 1988).
4. For all critical contrast analyses, tests of the residuals (see Levin & Neumann, 1999) were nonsignificant.
5. The degrees of freedom are different in this analysis because one participant (considering race/ethnicity) did not respond to the stereotype endorsement items.
6. Although we did know the general category of stigmatizable group prior to participation (e.g., religion), each participant's specific ingroup (e.g., Mormon, Muslim, Jewish, Fundamentalist Christian) was unknown prior to participation. As a result, it was impossible to differentiate between the outgroup and ingroup as the source of the stereotype threat in this study.
7. To further assess the unique pattern of data reported by low stereotype-endorsing and low identifying groups, we tested whether the predicted pattern of data for each group type was also present in the other group. Consistent with expectations, the predicted pattern of data for each group type did not emerge within the other group type.

References

- Aboud, F. E. (1988). *Children and prejudice*. New York, NY: Basil Blackwell.
- Akiba, D., Szalacha, L. A., & Garcia Coll, C. T. (2004). Multiplicity of ethnic identification during middle childhood: Conceptual and methodological considerations. *New Directions for Child and Adolescent Development, 104*, 45-60.
- Aronson, J., & Inzlicht, M. (2004). The ups and downs of attributional ambiguity: Stereotype vulnerability and the academic self-knowledge of Black college students. *Psychological Science, 15*, 829-836.
- Bigler, R. S., Averhart, C. J., & Liben, L. S. (2003). Race and the workforce: Occupational status, aspirations, and stereotyping among African American children. *Developmental Psychology, 39*, 572-580.
- Blascovich, J., Spencer, S., Quinn, D., & Steele, C. (2001). Blacks and high blood pressure: The role of stereotype threat. *Psychological Science, 12*, 225-229.
- Brewin, C. R., MacCarthy, B., Duda, K., & Vaughn, C. E. (1991). Attribution and expressed emotion in the relatives of patients with schizophrenia. *Journal of Abnormal Psychology, 100*, 546-554.
- Chandra, A., & Minkovitz, C. S. (2007). Factors that influence mental health stigma among 8th grade adolescents. *Journal of Youth and Adolescence, 36*, 763-774.
- Cohen, A. B. (2009). Many forms of culture. *American Psychologist, 64*, 94-204.
- Cohen, G. L., & Garcia, J. (2005). "I am us": Negative stereotypes as collective threats. *Journal of Personality and Social Psychology, 89*, 566-582.
- Corrigan, P. (2004). How stigma interferes with mental health care. *American Psychologist, 59*, 614-625.
- Corrigan, P., & Watson, A. (2002). The paradox of self-stigma and mental illness. *Clinical Psychology: Science and Practice, 9*, 35-53.
- Crandall, C. S. (1991). Do heavy-weight students have more difficulty paying for college? *Personality and Social Psychology Bulletin, 17*, 606-611.
- Crandall, C. S. (1995). Do parents discriminate against their heavy-weight daughters? *Personality and Social Psychology Bulletin, 21*, 724-735.
- Crandall, C., & Biernat, M. (1990). The ideology of anti-fat attitudes. *Journal of Applied Social Psychology, 20*, 227-243.
- Crocker, J., & Major, B. (1989). Social stigma and self-esteem: The self-protective properties of stigma. *Psychological Review, 96*, 608-630.
- Davies, P. G., Spencer, S. J., Quinn, D. M., & Gerhardstein, R. (2002). Consuming images: How television commercials that elicit stereotype threat can restrain women academically and professionally. *Personality and Social Psychology Bulletin, 28*, 1615-1628.
- Goff, P. A., Steele, C. M., & Davies, P. G. (2008). The space between us: Stereotype threat and distance in interracial contexts. *Journal of Personality and Social Psychology, 94*, 91-107.
- Goffman, E. (1963). *Notes on the management of spoiled identity*. New York, NY: Simon & Schuster.
- Jones, E., Farina, A., Hastorf, A., Markus, H., Miller, D., & Scott, R. (1984). *Social stigma: The psychology of marked relationships*. New York, NY: Freeman.
- Kiefer, A. K., & Sekaquaptewa, D. (2007). Implicit stereotypes, gender identification, and math-related outcomes: A prospective study of female college students. *Psychological Science, 18*, 13-18.
- Kiefer, A., Sekaquaptewa, D., & Barczyk, A. (2006). When appearance concerns make women look bad: Solo status and body image concerns diminish women's academic performance. *Journal of Experimental Social Psychology, 42*, 78-86.
- Levin, J. R., & Neumann, E. (1999). Testing for predicted patterns: When interest in the whole is greater than in some of its parts. *Psychological Methods, 4*, 44-57.
- Lickel, B., Hamilton, D. L., Wierzchowska, G., Lewis, A., Sherman, S. J., & Uhles, A. N. (2000). Varieties of groups and the perception of group entitativity. *Journal of Personality and Social Psychology, 78*, 223-246.
- Link, B. G., Cullen, F. T., Struening, E., Shrout, P. E., & Dohrenwend, B. P. (1989). A modified labeling theory approach

- to mental disorders: An empirical assessment. *American Sociological Review*, 54, 400-423.
- Madge, N. J. H. (1976). Context and expressed ethnic preferences of infant school-children. *Journal of Child Psychology and Psychiatry and Allied Disciplines*, 17, 337-344.
- Marx, D. M., & Goff, P. A. (2005). Clearing the air: The effect of experimenter race on target's test performance and subjective experience. *British Journal of Social Psychology*, 44, 645-657.
- Marx, D. M., Ko, S. J., & Friedman, R. A. (2009). The "Obama effect": How a salient role model reduces race-based performance differences. *Journal of Experimental Social Psychology*, 45, 953-956.
- Marx, D. M., Stapel, D. A., & Muller, D. (2005). We can do it: The interplay of construal orientation and social comparison under threat. *Journal of Personality and Social Psychology*, 88, 432-446.
- McKown, C., & Weinstein, R. S. (2003). The development and consequences of stereotype consciousness in middle childhood. *Child Development*, 74, 498-515.
- Moses, T. (2010). Being treated differently: Stigma experiences with family, peers, and school staff among adolescents with mental health disorders. *Social Science and Medicine*, 70, 985-993.
- Quinn, D. M., & Crocker, J. (1999). When ideology hurts: Effects of belief in the Protestant ethic and feeling overweight on the psychological well-being of women. *Journal of Personality and Social Psychology*, 77, 402-414.
- Quinn, D. M., Kahng, S. K., & Crocker, J. (2004). Discreditable: Stigma effects of revealing a mental illness history on test performance. *Personality and Social Psychology Bulletin*, 30, 803-815.
- Rusch, N., Corrigan, P. W., Todd, A. R., & Bodenhausen, G. V. (2010). Implicit self-stigma in people with mental illness. *Journal of Nervous and Mental Disease*, 198, 150-153.
- Rusch, N., Todd, A. R., Bodenhausen, G. V., Olschewski, M., & Corrigan, P. W. (2010). Automatically activated shame reactions and perceived legitimacy of discrimination: A longitudinal study among people with mental illness. *Journal of Behavior Therapy and Experimental Psychiatry*, 41, 60-63.
- Schmader, T. (2002). Gender identification moderates stereotype threat effects on women's math performance. *Journal of Experimental Social Psychology*, 38, 194-201.
- Schmader, T., & Johns, M. (2003). Converging evidence that stereotype threat reduces working memory capacity. *Journal of Personality and Social Psychology*, 3, 440-452.
- Schmader, T., Johns, M., & Barquissau, M. (2004). The costs of accepting gender differences: The role of stereotype endorsement in women's experience in the math domain. *Sex Roles*, 50, 835-850.
- Schmader, T., Johns, M., & Forbes, C. (2008). An integrated process model of stereotype threat effects on performance. *Psychological Review*, 115, 336-356.
- Sellers, R. M., Smith, M. A., Shelton, J. N., Rowley, S. A. J., & Chavous, T. M. (1998). Multidimensional model of racial identity: A reconceptualization of Black racial identity. *Personality and Social Psychology Review*, 2, 18-39.
- Shapiro, J. R. (in press). Types of threats: From stereotype threat to stereotype threats. In T. Schmader & M. Inzlicht (Eds.), *Stereotype threat: Theory, process, and application*. Oxford, UK: Oxford University Press.
- Shapiro, J. R., & Neuberg, S. L. (2007). From stereotype threat to stereotype threats: Implications of a Multi-Threat Framework for causes, moderators, mediators, consequences, and interventions. *Personality and Social Psychology Review*, 11, 107-130.
- Steele, C. M. (1999). Thin ice: "Stereotype threat" and Black college students. *Atlantic Monthly*, 284, 44-54.
- Steele, C. M., & Aronson, J. (1995). Stereotype threat and the intellectual test performance of African Americans. *Journal of Personality and Social Psychology*, 69, 797-811.
- Steele, C. M., Spencer, S. J., & Aronson, J. (2002). Contending with group image: The psychology of stereotype and social identity threat. In M. P. Zanna (Ed.), *Advances in experimental social psychology* (Vol. 34, pp. 379-440). San Diego, CA: Academic Press.
- Teachman, B. A., Wilson, J. G., & Komarovskaya, I. (2006). Implicit and explicit stigma of mental illness in diagnosed and healthy samples. *Journal of Social and Clinical Psychology*, 25, 75-95.
- Turner, K. L., & Brown, C. S. (2007). The importance of gender and ethnic identities across individuals and contexts. *Social Development*, 16, 700-719.
- Weiner, B., Perry, R. P., & Magnusson, J. (1988). An attributional analysis of reactions to stigmas. *Journal of Personality and Social Psychology*, 55, 738-748.
- Wright, B. A. (1983). *Physical disability: A psychosocial approach* (2nd ed.). New York, NY: Harper & Row.